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CONTENTS

OF THE

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[BEING No. II. OF A DECENNIAL SERIES.]

REVIEWS.

I.	
Leçons Orales de Clinique Chirurgicale, faites à l'Hôtel Dieu de Paris. Par M. DUPUYTREN	289
II.	
Pathological and Surgical Observations on Diseases of the Joints. By B. C. BRODIE, V. P. R. S.	331
III.	
Physiologie Végétale. Par A. P. de CAUDOLLE	353
IV.	
An Inquiry into the Nature of Sleep and Death, &c. By A. P. W. PHILIP, M. D.	359
V.	
A New System of Organic Chemistry. By F. V. RASPAIL. Translated by W. HENDERSON, M. D.	365
VI.	
A Treatise on the Diseases and Injuries of the Spinal Nerves. By Jos. SWAN, Esq.	371
VII.	
A Treatise on the Circulation of the Blood. By J. F. HANDLEY, Esq.	390
VIII.	
A Treatise on the Diseases of the Skin. By P. RAYER, D.M.P. Translated by W. B. DICKINSON, Esq.	391
IX.	
The Inaugural Dissertation of C. F. J. BELLINGERI	413
X.	

WORKS ON PATHOLOGICAL ANATOMY:

1. Principles and Illustrations of Morbid Anatomy. By J. HOPE, M.D. Part XII.	424
2. Illustrations of the Elementary Forms of Disease. By ROBT. CARSWELL, M.D. Fasciculus VI.	

PERISCOPE.

PART I.

SPIRIT OF THE ENGLISH PERIODICALS, AND NOTICES OF ENGLISH MEDICAL LITERATURE.

1. Influence of Bodily Position on the Pulse. By T. R. Blackley, A. B.	433
2. Danger of Ergot of Rye in Large Doses	435
3. On Scrofula. By J. Eager, M.D.	435
4. Anomalous Tumor in the Right Hypochondrium	438
5. The Rev. Thos. Everest on Homœopathy	439

6. Somnambulism. Case of Jane Ryder	440
7. Nitrate of Silver in Epidemic Cholera. By C. Lever, M.D.	444
8. Observations on Internal Aneurism. By Professor Harrison, of Dublin	445
Comments of Dr. Stokes	448
9. On Manual Assistance in Abortion. By Mr. Wainwright, of Liverpool	448
10. Dr. James Johnson's Case of Crackling of the Muscles	452
11. Case of Hydatids of the Kidney voided by the Urethra	453
12. Mr. Tyrrell on Catarrhal and Catarrho-Rheumatic Ophthalmia	454
A. Catarrhal Ophthalmia	454
B. Catarrho-Rheumatic Ophthalmia	455
C. Treatment	456
13. Researches of Dr. Stokes on the Diagnosis and Pathology of Aneurism	458
A. Aneurism of the Hepatic Artery	458
B. Aneurism of the Innominata	459
C. Rupture of the Ascending Aorta	461
D. Aneurism of the Thoracic Aorta, recognized during Life	461
14. A Practical Treatise on Medical Jurisprudence. By J. Chitty, Esq. Barrister	462
15. Mr. Thurnam's Dissections of the Otic Ganglion	465
16. An Essay on the Relation of the Theory of Morals to Insanity. By T. Mayo, M.D.	466
17. Dr. Forbes on the Climate of the Land's End	468
18. Mr. Sandwith on Whooping-Cough	471
19. The Morbus Oryzeus, and Atrocities of Ricemen	471
20. On Mr. Stafford's Plan of perforating Strictures	473
21. Dr. A. T. Thompson on Ioduret and Hydriodate of Iron	476
22. A Dictionary of Terms employed by the French in Anatomy, Physiology, &c. By Shirley Palmer, M.D.	477
23. Mr. Guthrie's Operation of Tying the Common Iliac Artery	478
Remarks upon the Case	481
24. Reclamation of Valentine Mott, with Reference to the Operation of tying the Common Iliac Artery with Success	483
25. Case of Fracture of the Skull, with Depression. By Mr. Cotton, of Bagshot	483
26. The Cholera	484
A. Innumerable Specifics for it	485
B. The Treatment by Emetics of Salt and Water	486
C. The Suggestions of the Editors	487
27. Case of Chronic Enlargement of the Clitoris. Treated by Mr. Edward, of Forfar	489
28. Literature of the Quarter	489
1. Illustrations of the Effects of Poisons. By Dr. Roupell and Mr. M'Whinnie	490
A. Effect of Concentrated Sulphuric Acid	490
B. Effect of Oxalic Acid	490
C. Effect of Corrosive Sublimate	491
D. Effect of Alcohol	491
2. Fragmenta de Viribus Medicamentorum Positivis. A. Saumele Hahnemann. Edidit F. F. Quin, M.D.	492
3. The Principles of Diagnosis. By Marshall Hall, M.D. Vol. I. 2d Edition	493
4. A Demonstration of the Nerves of the Human Body. Quarto. By Jos. Swan, Esq.	494

5. An Essay on the Deaf and Dumb. By J. Curtis, Esq. 495
 6. A Practical Treatise on the Lepra Vulgaris. By Edward Beck, M.D. 495

PART II.

SPIRIT OF THE FOREIGN PERIODICALS.

29. On the Operation of Staphyloraphy 495
 30. On the Curative Effects of Abstinence 498
 31. On the Operation of Pelviotomy 500
 32. Removal of Calculi from the Perineum 501
 33. Disease of the Cerebellum, and curious Disturbance of the Muscular Powers 501
 34. Hypertrophy of the Muscular Coat of the Stomach 502
 35. Inflammation of the Membranes of the Ovum 502
 36. Case of Fatal Opisthotonos 503
 37. Cancerous Ulceration of the Nose, treated with Creosote 505
 38. On the Employment of Soot as a Substitute for Creosote 506
 Cases and Experiments 506
 39. Lotions of Corrosive Sublimate for Ophthalmia 509
 40. On the Use of Chloruret of Lime in Blennorrhagia 510
 41. On the Section of the Tendo Achillis in Cases of Club-Foot 510
 42. Spontaneous Dry Gangrene cured by Bleeding 512
 43. M. Dupuytren on Hydrocele of the Neck 513
 44. On the Paralysis induced by the Preparations of Lead 514
 45. Literary Curiosities 515
 46. Chemical Examination of Spots caused by Blood and Semen on Linen 516
 47. Analytical Epitome of the Second and Third Sections of Cayol's *Traité des*
 Maladies Cancéreuses 517
 a. External Remedies employed for Cancer 517
 b. Internal Remedies so employed 520
 c. Salts and other Mineral Substances 521
 d. Different Empirical Remedies 522
 48. Vaginal Discharges suspected to arise from Violation—in very young females 524
 49. On certain Mental Illusions 524
 50. Further Particulars respecting the Properties of Creosote 527
 51. On Hypertrophy of the Mammæ 528

PART III.

CLINICAL REVIEW AND HOSPITAL REPORTS.

ST. GEORGE'S HOSPITAL.

52. a. Clinical Remarks on Ununited Fractures. By Mr. Brodie 529
 b. Clinical Remarks on some Cases of Disease of the Urinary Organs. By
 Cæsar Hawkins, Esq. 530
 c. Report on Hernia, from the Case-Book of Mr. Hawkins 533
 1. Strangulated Hernia—early Operation 533
 2. Incarcerated Omental Hernia 534
 3. Wearing a Truss on an Irreducible Hernia 535
 4. Rupture of Intestine by a Blow upon a Hernia 535
 5. Hernia produced by a Blow 536
 6. Treatment after the Operation for Hernia 537
 7. Operation followed by Prostration 537
 8. Operation twice performed—sloughing of the Intestine 539

LONDON DISPENSARY.

53. On the best mode of treating Mammary Abscess 540

MEATH HOSPITAL.

54. Dr. Stokes on the Neuroses—Cerebritis—Phrenology 542

MIDDLESEX HOSPITAL.

55. Cases of Poisoning by Barytes and the Mineral Acids 548
 1. Poisoning by Carbonate of Barytes 549
 2. Poisoning by Nitric Acid 549
 3. Poisoning by Sulphuric Acid 549

CITY OF LIMERICK INFIRMARY.

56. Surgical Report of Mr. Kane 550

RICHMOND SURGICAL HOSPITAL.

57. Dr. O'Beirne on Hydrocele of the Neck 554

MEATH HOSPITAL.

58. Clinical Remarks of Dr. Graves on various Diseases 557
 1. On Simple Pneumo-thorax 558
 2. Bruit de Soufflet of the Heart in Pneumonia 559
 3. Symmetrical Erysipelas 559
 4. On the best Mode of administering Calomel in Acute Inflammation 559
 5. Spontaneous Cure of Chronic Ascites 560
 6. Diffuse Inflammation fatal from Effusion into the Chest 560
 7. Loss of the Sense of Smelling 561
 8. Carbonate of Ammonia in the Urine 561
 9. Albuminous Urine in Dropsy 562
 10. Diabetes Insipidus 563

MANCHESTER ROYAL INFIRMARY.

59. Dr. Carbütt's Clinical Lectures 563

MISCELLANIES.

60. The North-West London Self-supporting Dispensary 567
 61. Last Curriculum of the College of Surgeons 569
 Circular to Lecturers 570
 62. Provincial Medical Schools 571
 63. Baronetcy of Mr. Brodie 573
 Bibliographical Record 574

INTELLIGENCE, CORRESPONDENCE, &c.

Reviews or notices of several works have been unavoidably postponed. Amongst others, the Provincial Transactions, and Mr. Simpson upon Education, which were promised for this number, must stand over for our next.

Two of the communications of Dr. Kennedy were too late. One, he will perceive, is inserted.

Dr. Forsayth was also too late for the present number. His case will appear in our next.

We are compelled to defer a notice of Mr. Stevenson's operation for cataract. We lately had the pleasure of seeing him perform it:—the dexterity was great, and we believe the result has been successful.

On the first of January, 1835, will be published *Professor Grant's Outlines of Comparative Anatomy, in one volume, 8vo.* with upwards one hundred woodcuts from drawings on wood by Mr. H. J. Townsend, engraved by Branston.

THE
Medico-Chirurgical Review,

No. XLII.

[NO. 2 OF A DECENNIAL SERIES.]

JULY 1, to OCTOBER 1, 1834.

LECONS ORALES DE CLINIQUE CHIRURGICALE, FAITES A L'HOTEL
DIEU DE PARIS. Par *M. le Baron Dupuytren*, Chirurgien en
Chef. Recueillies et publiées par une Société de Médecins.
Tomes 2 et 3 :—à Paris, 1832, 1833.

[Continued from page 91, of No. 37.]

It is not, perhaps, necessary to enter into the reasons, which have occasioned the long interval between the former and the present notice of *M. Dupuytren's* lectures. These lectures have formed a staple article with our contemporaries, at least, with that portion of them whose visits are *not* few and far between; we mean the weekly journals. Yet these journals have presented them at such lengthened intervals, that the chain of connexion and interest is broken, and they resemble scattered and insulated pearls, rather than a close and well-arranged tissue, valuable in its construction as well as its material.

We would recommend all whose education enables them to understand the French language, and whose means permit them to purchase the volumes containing the lectures, not to rest contented with mere translations. We have no hesitation in expressing our opinion, that the *Leçons Orales* will become a standard work, and will be found in the libraries of all accomplished surgeons. But we cannot acquiesce in the extravagant eulogy which some of our contemporaries have heaped upon it, nor do we feel constrained or inclined to admit, that it throws into the shade the efforts of modern English surgeons.

A candid and rational consideration will lead, we apprehend, to a more moderate appreciation of its merits. It will probably be perceived to display the peculiar excellencies and defects of the present style of surgical works in France. There will be seen the abundance of all that is deducible from anatomy and pathology—the accurate description—and, in general, the just diagnosis; but there will be also seen the absence of that acquaintance with the powers of remedies, and the want of that decision and judgment in their application, which honourably distinguish the British school of Medicine.

A critical examination will discover, in many instances, another fault—one almost peculiar to the French nation. It is a fickleness and inconstancy in reasoning, as in character—a levity which has marked the disposition of the Gaul from the days when *Cæsar* first conquered and studied the

aboriginal tribes. The French medical or surgical writer of the present day, always talks of a rigorous attention to facts, and inculcates the necessity of absolute induction; yet, in some way or other, it usually happens that his conclusions exhibit the powers of his imagination, rather than the strength and sobriety of his judgment. French works are too often insufferably diffuse, the language and the taste encouraging the "*copia fandi*." The tired reader struggles through innumerable pages, where the verbiage surrounds him like the tall thick grass of an Indian prairie, concealing the prospect, and almost obscuring the sky.

We cannot be accused of a wish to depreciate continental literature or foreign science. Few have laboured with more zeal or more anxiety to diffuse an acquaintance with both among our brethren. But we trust we are possessed of sufficient patriotism to award justice to our native land, and to claim for her the respect and the praise which are her due. It appears to us ridiculous to assert that English surgeons are below the level of their brethren on the Continent. We would wish to be informed what modern French or German works can be ranked above that of Mr. Brôdie on the joints—or can be deemed superior to those of Sir Astley Cooper on fractures and dislocations, and on diseases of the testis? If there be such, we confess that we are unacquainted with them.

The memoirs and the lectures of M. Dupuytren display a smaller share of the defects, and a more preponderating amount of the merits of the French school of surgery, than those of his contemporaries. His mind is cast in the English mould, or, rather, his observation and his vast experience have contributed to diminish that fanciful spirit which distinguishes the great majority of his countrymen. In perusing his observations, we feel that we are holding converse with a practical man, and we do not appear to be regarding the declamatory candidate for the Concours.

Our former notice of the second volume of the *Leçons Orales* was carried to the last article contained in it—one devoted to the subject of gun-shot wounds.

The third volume of M. Dupuytren's lectures contains eighteen articles—the fourth exhibits fifteen more. The latter forms the completion of the work. We have recommended all who can readily read and translate the French language, to purchase the volumes in their native form. But possibly many are insufficiently acquainted with that language, and probably more can ill afford the sum* to which the work amounts. We think then we shall be doing an acceptable service to our readers, in presenting, in as connected and condensed a manner as our limits and the subjects will permit, an analysis of the two concluding volumes, and of the article on gun-shot wounds in the second.

The émeutes of Paris have given the surgeons of that peaceable capital considerable opportunities of observing the accidents of war. The works of Dr. Hennen and of Mr. Guthrie, familiar as they are to the profession, and embodying as they do the whole of what is known on the injuries of which they treat, will render a copious and particular notice of the Baron's obser-

* The price of the four volumes is one pound, eight shillings, and four-pence.

vations superfluous. We shall limit this portion of our task to selection of what may be novel, curious, or important.

ON GUN-SHOT WOUNDS.

This article occupies two hundred pages of the work. M. Dupuytren commences with some general observations on the effects of fire-arms, and remarks that they depend on two principal circumstances:—the nature of the charge, and the distance at which the piece is fired. Without following M. Dupuytren through his remarks on the action of the different varieties of fire-arms, and his exposition of the laws which regulate the course and the arrest of balls, we may glance at one or two particulars.

If a piece is charged with powder but no wadding, the explosion is considerable, yet sufficient to contuse the skin severely, when the charge is received at a short distance. But if wadding is employed, the injury which it produces is determined by the quantum of resistance, and the situation of the body struck. A case of this description occurred to M. Dupuytren. Two individuals quarrelled, and one in the heat of passion discharged his gun, which was loaded with powder only, into the abdomen of the other, who immediately fell dead. The piece had been discharged at the distance of a foot or two. On examining the deceased, the clothes were found torn—the anterior wall of the abdomen penetrated by a hole of more than an inch in diameter—the intestine wounded—and the wadding of the piece in the cavity of the belly.

Suicides frequently forget to load the pistol with ball. The parietes of the mouth are violently distended by the rarefaction of the air. Sometimes the wadding traverses the palatine vault. If the direction of the fire is backwards, the vertebral column offers effectual resistance, but the soft palate is torn, and sometimes the inferior maxillary bone is broken.

Small shot of different dimensions operates in two manners—that is, it strikes *en masse*, or after it has spread. In the former case, its action is more dangerous than that of a single ball, because it lacerates extensively the parts into which it is impelled; but where it has spread, the discharge must, of course, have been remote, and comparatively little mischief is inflicted. Much, however, must depend on the part which is injured. If the eye be struck with a single grain of shot, it is irretrievably lost.

Passing over some pages of familiar remark, we may pause to listen to the observations of the Baron on the action of clothing in modifying the effect of balls, and on the injury produced by what has been termed their *wind*. Articles of dress, especially when wollen, protect in some degree the parts they cover. The hole made by a ball in clothes is always smaller than that in the skin. The ball often enters a limb to a considerable depth, without occasioning any perforation in the dress, which is, consequently, carried before it. In 1814, a French soldier, who was wounded before the walls of Paris, was carried to the Hôtel Dieu. On examining the upper portion of the leg, some pieces of cloth were found buried in the bone. On pulling at these with some force, a kind of wadding was extracted, containing a ball inclosed in a part of the soldier's gaiter. Amongst the wounded received at La Pitié, in July 1830, was a patient who presented a nearly similar occurrence. A ball had entered the abdomen, carrying before it a

part of the shirt, by means of which the bullet was extracted; the patient recovered. The difference of size between the wound in the clothing and that in the skin, depends on their respective elasticity. The circumstance should be remembered, as an unacquaintance with it gave rise to the idea that Charles XII. of Sweden was assassinated. The ball had pierced the border of the monarch's hat, and entered the anterior part of the cranium, the opening in which was much larger than that in the hat.

The notion of serious injury from the wind of the ball arises from the difference of elastic resistance in various tissues of the body. If a projectile, nearly spent, or at least much diminished in force, strikes obliquely on a rounded surface, like the thigh, it may pursue its course, without leaving any mark upon the trowser of the wounded man. The limb which has been struck is rendered numb and powerless, and the person falls. On examining the thigh the bone is discovered to be broken, the soft parts disorganized, and the skin apparently uninjured. The fact would seem to be, that the muscles, at the time when the limb is struck, are in a state of tension, and yield to the violence more readily than the elastic skin. If, instead of a limb, the chest should be the stricken part, instantaneous death may be the consequence, and a careful examination may be necessary to disclose its cause.

One ball may inflict several wounds, in consequence of its impinging on some hard substance at first, and being thereby broken into two or more portions. Thus a ball struck the lower part of the spine of the tibia in the right leg, and was divided by it into two pieces. Each, diverging a little, passed through the calf, and lodged in the fleshy part of the left leg, which happened to be placed behind the other.

The observations of the Baron on the lodgment of balls, and on their travelling propensities, are deserving of attention.

When a ball is lodged in any organ or tissue, it either excites inflammation and suppuration, or it does not. If none is occasioned, a cyst is formed, attached on its exterior to the surrounding tissue, and resembling on its internal surface a serous membrane; thus the ball is enclosed in a serous cyst. This is a fact of practical importance, for, in performing an operation for the extraction of a ball, if the cyst is left behind, an accumulation of serum in its cavity ensues, and an encysted tumor is the consequence. In removing the ball, the cyst must either be dissected out, or it must be dressed in the interior with lint, in order to produce suppuration and granulation. If inflammation is excited by the ball, the cyst, instead of secreting serum, gives rise to pus, and ultimately fistulous sinuses are formed, connecting the interior of the cyst with some internal cavity, or with the surface of the body.

When balls travel, their progress may be rapid or slow. If the former, they leave no traces of their passage in the organs which they traverse. If the latter, they are surrounded by the serous apparatus just described. Bodies of all forms may shift their quarters in the body, though such as are narrow and pointed will do so with more ease than those which are spherical and obtuse. M. Dupuytren cautions the surgeon to be satisfied of the situation of the foreign body at the time when he performs the operation. If he cuts in a direction where he may have felt it the preceding day, it is possible that it may have removed in the interim. Balls usually travel from

the interior towards the surface, but sometimes they pursue the contrary route.

We may pause for a few moments at the Baron's description of the injuries inflicted by balls upon the bones. Sometimes, merely a contusion is produced; but this is more serious than it seems, for the periosteum is destroyed, or inflames, and necrosis may ensue. That the bones should be fractured in various ways, and shattered in various degrees, can scarcely be productive of surprise. But it might not be anticipated that the resistance of bone would be sufficient to break or divide a ball. When the latter impinges on an angle of bone, such is occasionally the fact. A ball which struck the spine of the tibia has been separated into two portions, which, traversing the leg, made their exit at separate apertures behind. A nearly similar division has been witnessed, in cases of injury of the flat bones. A Swiss soldier was wounded by a ball, which fractured the right parietal bone, and was divided into two; one portion made its escape through the integuments, whilst the other penetrated the brain, and lodged on the tentorium cerebelli. At the same period, there was in the Hôtel Dieu a patient in whom a ball, having broken the occipital bone, was split into two portions, which still remained slightly united, and were arrested at the opening, over which they were placed, as it were, astraddle.

M. Dupuytren relates a case, in order to shew how difficult it sometimes is to determine if a ball has entirely escaped, or has partially lodged. A Parisian was wounded by a ball, which penetrated above the clavicle, and made its exit behind, near the inferior angle of the scapula. The ball presented no other peculiarity than that of being rather flattened on one facet. The patient appeared to be cured, but, on examining him some time afterwards, a hard substance was felt near the posterior wound. An incision was made on it, and a portion of ball was removed. On weighing this, with what seemed the entire ball, the compound weight was found to be that of an ordinary bullet.

M. Dupuytren relates some cases to exhibit the extraordinary course of balls. So many have been recorded by Dr. Hennen, Mr. Guthrie, and other surgical writers, that we do not think it necessary to pursue the subject.

The Baron has little to say, or at least he says but little, on that serious affection denominated, perhaps not quite correctly, hospital gangrene. He states that in 1814, when the Hôtel Dieu was extremely crowded, many cases of this description occurred; but that, in 1830, when the wards were not too full, and the arrangements were improved, few instances were met with. Contused wounds are those which are most frequently affected with this species of gangrene, and, in 1830, the hands and the feet were the parts in which it commonly appeared.

The compound fractures produced by gun-shot are usually dangerous and severe. We perceive no novelty in M. Dupuytren's description of the immediate consequences of injuries of this description. We may cite one remark, on the period at which secondary hæmorrhage; from the pressure of a fragment of bone, is observed. It is usually late, and subsequent to that at which bleeding from the separation of sloughs is noticed. M. Pelletan saw a case, in which the hæmorrhage occurred on the 70th day.

We may rest for a moment to listen to the lecturer's description of the different conditions which fragments or splinters of fractured bones may ex-

hibit in a limb. He arranges them methodically into primary, secondary and tertiary splinters. The primary splinters are those which result from the operation of the wounding agent. When left to themselves, they die, and operate like foreign bodies, giving rise to extensive suppuration, or to troublesome sinuses. The second order of splinters are such as preserve some adhesions to the parts with which the bones are naturally connected. These adhesions may be insufficient to preserve their vitality, when they fall into the condition of the primary splinters; or the life of the fragments may continue, and they then contribute to the formation of the callus. The third kind of splinters are such as result from the process of necrosis. They remain in their place till that process is so far completed, as to cause or to facilitate their expulsion. The broken ends of the bone are not, in the mean time, united; but consolidation is going on around in the periosteum, the cellular texture, and the other soft parts, and a bony clasp or ferule is formed, supporting, and so far joining, the fractured bone. If the splinters are too large to be expelled, they are locked up, like sequestra, in this new bone or callus, and fistulous sinuses connect them with the exterior, as in ordinary cases of necrosis. To remove them, it is necessary to apply the trephine, and perforate the fresh bony matter.*

M. Dupuytren observes that, among the severe consequences or complications of gun-shot wounds, hæmorrhage, especially of a secondary character, tetanus, collapse, ersipelas, diffuse phlegmon, and inflammations of internal organs, must occupy the foremost rank.

Few remarks on those subjects will be necessary, the attention of the profession in this country having either been lately or sufficiently attracted to them. We may notice the Baron's observations upon hæmorrhage.

It is known that gun-shot, like all contused, wounds are little disposed to bleed in the first instance. Patients, however, occasionally die from immediate hæmorrhage, an example of which, in a case of gun-shot wound of the femoral artery, is related by the Baron. Secondary hæmorrhage is much more common, and occurs under two conditions of the artery—when it has been totally divided, or when it has been only partially wounded. In the first case, the eschar produced by the immediate action of the ball, and the coagulum which forms at the orifice of the vessel, seal and prevent the occurrence of hæmorrhage. Accidental causes may increase the circulation, when the clot and the eschar may prove insufficient to prevent the flow of blood. But, in other instances, the bleeding is delayed till the process of suppuration has separated the sloughs, which is usually from the tenth to the twentieth day. Hæmorrhage, in these cases, is seldom preceded by any distinctive circumstances or signs, excepting, perhaps, a sero-sanguinolent discharge, which sometimes issues from the wound. In primary hæmorrhage, the vessel must be tied at the spot where it bleeds; in secondary hæmorrhage, it must be secured, in sound parts, between this and the heart.

M. Dupuytren has seen secondary hæmorrhage from vessels of small, as

* For the reader to appreciate, to the full extent, the preceding observations and description, it is necessary that he should be familiar with M. Dupuytren's description of the process by which fractured bones are united; and with the value of the application of the trephine in cases of necrosis.—Eds.

well as large calibre. An officer in the wards of the Hôtel Dieu had such hæmorrhage from the wound of a branch of the temporal artery. Compression proving ineffectual, M. Dupuytren cut down, and tied the vessel on a roll of diachylon.

Varicose aneurism, or rather aneurismal varyx, is sometimes a result of gun-shot wounds.* M. Dupuytren has witnessed an instance of this sort in the shoulder—and in the case of the subclavian artery and vein. He has also observed it follow the reception of a charge of small shot. An appraiser who was wounded in this manner in the hypogastrium, thighs, and genital organs, discovered, at the end of five or six months, a whizzing in the thigh. This could be distinctly heard on the application of the ear, and resembled that produced by the passage of the blood from a large artery into a vein. When pressure was made above the part, it ceased—when applied below, it was increased. A bandage was constructed, and the patient has since enjoyed good health. In his remarks upon the treatment, M. Dupuytren would seem to recommend a practice, which most practical surgeons in this country tacitly or openly condemn. He observes that pressure is always inconvenient, generally insupportable, and seldom advantageous. Ligature of the artery, above the disease, may answer in a recent, but is always unsuccessful in an old case. He, therefore, advises that a ligature should be placed upon the vessel above and below the seat of the disease. The practice in this country is to do but little. If moderate compression can be borne without difficulty, it is reasonable to employ it. If it cannot be supported, and the complaint is not productive of excessive inconvenience, it is not worth the while of the surgeon to perform, nor of the patient to submit to, any operation. But, if the affection should prove troublesome or dangerous, we suppose that the advice of M. Dupuytren may be taken, and a ligature may be applied upon the artery, above and below the communication with the vein.

We may cast a furtive glance at an interesting subject approached by M. Dupuytren—it is the influence of mental emotions, or of moral agencies, upon the wounded. It has long been remarked that, after a battle, the wounds of the victors have usually done better than those of the vanquished. In civil conflicts, the fact is still more striking. During "the three days," the mortality amongst the triumphant citizens was comparatively much less than that of the beaten military. The reverse was observed in the unfortunate émeutes of June, 1832. The young soldier generally suffers more severely than the veteran—his friends, his home, his family crowd upon his mind, and, under the anguish or the terror of his wound, he bids an eternal farewell to all. The veteran, on the other hand, is more affected and depressed by the loss of a battle or campaign. The effects of sudden and passing emotions are equally conspicuous. A young man, who was doing well with a fracture of the leg, was informed one evening, by his landlord, that, unless his rent was paid, his goods must be seized and sold. On the next day, he was found labouring under severe fever and great nervous excite-

* The varicose aneurism is that condition, in which an aneurismal sac intervenes between the artery and vein, with both of which it communicates by an opening in either. The aneurismal varyx is a communication between the artery and vein, without any intermediate sac.—Eds.

ment. A workman, slightly wounded in the hand, died rapidly with nervous symptoms, in consequence of the impression produced upon his mind, by his leaving unprovided a girl he was about to marry. Several of the wounded, in 1832, died in a few hours, on being told that, after their recovery, they would be tried by a court-martial. M. Dupuytren denounces, in terms of strong but just indignation, the atrocious improvement in tyranny adopted by the Government of the barricades. That Government was not ashamed to resort to a barbarous meanness, which the lofty and more noble despotisms of the reign of terror, the consulate, the empire, and the restoration had never condescended to imagine.* Louis Philippe surrounded the hospitals with a military force, and, as the medical public are aware, actually dared to command the surgeons to become the official delators of their patients. That they refused, is no more than might be expected from a liberal and humane profession. The terror inspired by the proceeding and the attempt, had the melancholy effect, which no doubt was intended, of destroying many of the unhappy sufferers.

The Baron next describes the effects of gun-shot wounds on particular portions of the body. He commences with wounds of the head. We are almost induced to notice his remarks on erysipelas, and on diffuse phlegmon of the scalp. The latter is really diffuse inflammation of the cellular membrane beneath the aponeurosis of the occipito-frontalis. It is common after scalp-wounds of every description—frequently mistaken by practitioners for erysipelas—and, when mistaken, fatal. The safety of the patient depends on the employment of incisions.† We believe we must “move on,” and we scarcely dare halt at the distinctive symptoms of concussion and compression. Yet they are brief, and may be noticed.

In concussion of the brain, says M. Dupuytren, the patient lies tranquilly—the face is pale—the lids are closed by the depression of the upper—the pupils are much dilated—the respiration so subdued as barely to indicate existence—the beat of the heart and of the pulse scarcely felt.

In compression, the patient is usually restless—the face is purplish—the pupil is contracted—the breathing difficult, the chest being seemingly loaded with mucus—there is stertor, and the pulse is frequent, full, and hard.

We cannot entirely agree with the Baron in this enumeration of respective symptoms. We have not found, and we do not believe, that the pupil is dilated in cases of concussion, and contracted in those of compression; the varieties are too great to warrant the positive antithesis. Neither is the face always turgid or reddened in compression; we have seen it absolutely pallid. The pulse, in the latter, is not always full, frequent and hard; on the contrary, it is not uncommonly labouring and slow. An allusion to partial or general paralysis might usefully have entered into the description of compression.

M. Dupuytren offers some lengthened remarks on the subject of contusion of the brain. The majority of surgeons and of surgical writers have considered only concussion, compression, and subsequent inflammation. In des-

* “Dont la pensée meme n'était jamais venue,” &c.

† In a report from St. George's Hospital, published in this Journal some three or four years ago, the subject was illustrated by several cases.

cribing contusion, M. Dupuytren has attempted, though without great success, to discriminate the symptoms that distinguish concussion and contusion. We are anxious not to dedicate much space to the lectures upon gun-shot wounds. We, therefore, waive the consideration of this question, and merely stop to notice a case related by the lecturer, in illustration of the following remark:—That if contusion affects only one lobe of the brain, three or four days in general elapse before unpleasant symptoms occur.

Case. A young man, 15 years of age, received a violent blow upon the head, which produced a wound, and loss of substance in the bones. For three days he was able to get up, and to walk freely in the ward. On the fourth day symptoms of contusion supervened, and in three days more the patient died. Half of the brain was found disorganized.

We could wish that the Baron had been more explicit in describing the mode of disorganization. At present, we are ignorant if the alteration was such as a blow might have occasioned, or rather the effect of inflammatory action. By the way, we may express a hope that it is not the common practice in the Hôtel Dieu, to allow a patient with a wound of the scalp, and a loss of bone, to walk about the wards immediately after the reception of the injury. If such is the method of treatment adopted, we should think that the Baron must have many opportunities of investigating the morbid changes produced by inflammation of the brain.

Wounds of the face are, in general, not productive of fatal consequences. Yet, occasionally, the secondary effects are very serious. One of the wounded of July had both jaws almost entirely carried away by case-shot. He sank under cerebral symptoms. Many citizens had the lower jaw broken by balls; some were cured—others died from repeated hæmorrhages—and others from inflammation, established in the brain or in the chest. An unfortunate effect of these wounds is the profuse and fetid suppuration, which, mingling with the saliva, is carried with it and the food into the stomach, and contaminates the whole economy.

Rupture of the *membrana tympani* is a frequent effect of the commotion produced by the discharge of artillery. Sometimes this occasions deafness—sometimes only dulness of hearing.

Balls sometimes lodge in the maxillary sinus, where they are felt by the patient moving about. In 1814, a lieutenant-colonel had had the masseter muscle and parotid gland destroyed by a ball, which had entered the sinus. Excessive swelling supervened; and when this had become diminished, the right nostril remained obstructed, and the sinus the seat of pain. These symptoms were supposed to depend on the presence of fragments of bone. Some were actually removed by operation; but a probe then detected the presence of a ball, which was removed by making an opening into the sinus, between the cheek and the alveolar process.

In wounds of the anterior part of the throat, whether suicidal or otherwise, M. Dupuytren has for some time adopted the use of sutures. He is careful, however, to leave a space, through which either blood or pus may issue.

M. Dupuytren's remarks on gun-shot injuries of the shoulder, or rather of the scapulo-humeral region, are perspicuous, instructive, and characteristic of his style. It is only necessary to particularize one point. When

the head of the humerus is shattered, amputation at the shoulder-joint is usually required. Yet, in many instances the operation of cutting down upon the bone, and removing merely the broken portions, is sufficient to preserve the limb and the life. This is, in fact, the application of the operation of excision of the heads of bones to the case of injury by gun-shot. The operation, in the instance of the shoulder-joint, may be performed by means of a simple incision through the deltoid, or by making a flap of that muscle.

Two facts, in reference to gun-shot wounds of the arm, are briefly mentioned by M. Dupuytren. Of course he indulges in other observations, to which we do not deem it necessary to allude. The facts in question are these.

1. A man received a gun-shot wound on the anterior part of the arm, at its upper and internal part. No nerve would seem to have been injured—at least no paralysis occurred; but a frightful hæmorrhage succeeded, and was only arrested by a ligature.* From that time forwards, no pulsation could be felt in the brachial, the radial, or the ulnar arteries. Those vessels were distinguished filled with blood, but without any pulsatory impulse. It is probable that, in this case, the brachial artery was wounded; but, although the circulation was maintained by the anastomosing branches, it was not sufficiently vigorous to transmit pulsation.

2. The question of re-union of divided nerves occupies the attention of the lecturer. He abstains from the expression of opinion, and leans on the statement of a fact. In two instances, the radial nerve was divided by a cutting instrument. Sensibility and motion returned in the parts supplied by it at the expiration of two years. The reader may turn, with some advantage, to the experiments and the remarks of Mr. Swan.†

In describing wounds of the chest and abdomen, M. Dupuytren alludes to the occurrence of great destruction of the viscera contained within these cavities, although their parietes display no lesion. He relates a case of such confusion of the viscera of the abdomen which occurred in a soldier, wounded in 1814 beneath the walls of Paris. A cannon-ball struck the left flank obliquely, but produced no external wound. The patient, who was carried to the ambulance at Veltette, was rallied by his comrades on his quitting the field of battle. The integuments of the abdomen became discoloured and dark—insensibility and immobility of the left lower extremity succeeded—vomiting, hæmaturia, and dyspnœa followed—and stupor closed the scene. On examination after death, the subcutaneous cellular tissue, the sacro-lumbalis muscle, the parietes of the abdomen, and the left kidney, were reduced to the state of bouilli—the lumbar nerves were torn—the transverse processes of the lumbar vertebræ, and the lower ribs, were shattered—and the cavity of the abdomen and left side of the chest were filled with black blood. The skin alone had resisted the disorganizing action of the shot.

We have been favoured by a Gentleman, whose labours and whose judgment are constantly the means of enriching the pages of this Journal, with

* Where, when, or how applied, we are not informed by the lecturer or reporter.

† For an account of those, see the last Number of this Journal.

a notice of a work lately published at Paris, and entitled a Treatise upon Gun-shot Wounds, founded on the clinical lectures before us. The present article upon the subject precludes the entire insertion of our correspondent's; but, as some of the questions are treated more fully in the Treatise than in the lecture, we shall take the opportunity of dovetailing some of the matter of our correspondent with our own. This will account for what might otherwise appear incongruous to those who possess the *Léçons Orales*. We shall select, in the present instance, the Baron's treatment of wounds of the intestines, for insertion.

"The principle upon which all rational attempts to re-unite wounds of such viscera as the intestines is founded, is the bringing into contact, and retaining in apposition, surfaces which, when inflamed, have a natural tendency to become agglutinated. Now it is well known that the mucous membranes have not this tendency, but that serous membranes have it most characteristically. It is on this principle that the proposal of M. Dupuytren, to cure false anus by the section of the "*parois adossées de l'intestin*" (the lips of the wound being inverted into the cavity of the gut, so that the opposite serous surfaces are brought into contact, and placed, as it were, back to back), is founded; and that, more lately, M. Jobert de Lamballe has been led to "*adosser, et maintenir adossées,*" by means of a suture, the serous membrane of the intestines, for the cure of wounds of these viscera. In the cases for which this description of suture is designed, the extent of the injury inflicted may be various; the gut may be merely wounded at one part, and this wound may be either parallel or oblique to its axis, or it (the gut) may be divided in a perpendicular direction, either partially or entirely round all its circumference. Hence there are different operations to be adopted, according to the nature and severity of the case.

1. When the wound of the intestine is a simple cut, whether the direction of this be parallel or oblique to its axis, we almost invariably find that it (the intestine) becomes more or less contracted upon itself, and that the lips of the wound are more or less turned inwards. If such be the state of parts, we should avoid disturbing it, as the very object of the operation is to bring and retain in contact the opposite and inverted serous surfaces of the wound. We should, therefore, be satisfied with merely washing the wound, and then, with the handle of the scalpel or with the point of the finger, smooth and make even its two lips:—The number of needles to be employed must correspond with the number of the sutures which we propose to make—they are to be passed through the whole thickness of the walls of each inverted intestinal fold (which is necessarily double) and the ligatures are to be tied separately; all the loose ends of the threads may be cut off, and the bowel be then gently re-placed in the abdomen, as near as possible to the outer wound. M. Lembert has observed, in his practice, that the ligatures usually escape into the cavity of the gut at the end of seven or eight days, after having cut across, by ulcerative absorption, the parts which they had embraced, and that a plastic exudation, which becomes very quickly organized, and remains for a considerable time afterwards, forms a bond of union (in the same manner as the provisional callus does in cases of fractured bone) between the wounded and the adjacent textures. The credit of first recommending and practising the above method of operation belongs to M. Lembert.

2. The proposal of M. Jobert is indeed in many respects very similar to that of M. Lembert; the essential difference consisting in his mode of tying the ligatures; for instead of tying each separately, he recommends that all the loose ends should be gathered into two little bundles and these then tied together: the gut being afterwards reduced into the abdomen, the two ends are to be secured to the lips of the outer wound by means of a strip of diachylon, and only when the adhesive union is sufficiently advanced are they to be gently drawn at. M. Jobert's own words, in his *Traité Theorique, et Pratique des Maladies Chirurgicales du Canal Intestinal*, 1829, are as follow:—

“Pour executer ce procédé, on lave les bords de la plaie avec de l'eau tiède, on les renverse en dedans avec l'aiguille, et on passe des fils transversalement dans les bords, en ayant soin, qu'ils soient assez rapprochés, pour que les parties qui se trouvent dans l'intervalle ne fassent point hernie, et que les sereuses restent en contact immediat. Les fils sont ensuite ramenés au dehors, et maintenus suivant le procédé de Ledran.”*

This operation is however not so praiseworthy as M. Lembert's; the opposite surfaces of the wounded gut being apt to become puckered and irregular, by the ligatures being tied all together.

3. M. Dupuytren proposes a modification of M. Lembert's method; the lips of the wound being brought in contact by their peritoneal surfaces, as already described, he passes through each inverted fold, a single needle, holding one thread, alternately from one side to the other, so that the thread is at every turn carried over the lips of the wound; or, without previously inverting the lips of the wound, “on traverse l'intestin à deux lignes d'une de ces lèvres, et d'un seul trait d'aiguille de dehors en dedans, et de dedans en dehors, on le traverse de même sur la lèvre opposée, et on ramene ensuite, chaque fois, le fil d'un coté à l'autre, de manière à former au dessus des lèvres de la plaie, dont le bords se trouvent alors renversés en dedans, une espece de spirale, comme dans la ‘suture du Pelletier.’” In this suture, the lips of the wound are retained in contact, not only at those points through which the thread passes, but also through the intervening spaces, in consequence of the spiral direction which it follows:—When the suture is completed, the ends of the thread are to be secured on the outside of the wound, as in M. Jobert's operation. The advantage of Dupuytren's method is, that only one needle and one thread are required for its performance.

When the intestinal tube has been fairly divided, M. Lembert recommends that we should employ the same method of operating as in simple or partial wounds. the edges of each divided portion are to be first gently inverted, and their serous surfaces brought and retained in apposition with each other by means of the suture “a points séparés;” much skill is required to adjust the two portions of intestine, but this will be facilitated by previously tying together the separated portions of the mesentery. Dupuytren prefers the “suture du Pelletier” to the interrupted suture employed by M. Lembert;

* The suture of Le Dran consists in gathering all the ligatures on one side of a wound into a bundle, and then those of the other, and tying, or twisting the two bundles together.

and he thinks that this preference is amply justified by the circumstance of M. L. having of late sometimes adopted it. An important rule to be attended to in all cases, is that the first stitches of the suture should be made through the part of the gut nearest to the insertion of its mesentery; when the suture is completed, the gut is to be replaced, and kept close to the outer wound by means of the two ends of the ligature, for five or six days; after which period they may be gently drawn at, to encourage their separation. Whatever kind of suture be employed, we must keep in mind that the success of the operation depends upon the nice apposition of the serous surfaces of the divided intestine. It is not necessary that we should be able to distinguish the upper, or gastric, from the lower, or anal, extremity of the intestine; and this circumstance alone is sufficient to induce us to prefer, in almost all cases, the "suture par adossement" to the "suture par invagination;" for in this latter operation, as the name implies, one step is to insert, or invaginate the upper into the lower portion of the gut, before we proceed to stitch them together: we have no doubt that it will be henceforth banished from surgery; the proceedings necessary for its accomplishment are too numerous and complicated, and tend to excite that very mischief, *viz.* inflammation of the bowels, which is so generally the cause of death in such cases.

It is singular to observe how the intestines sometimes escape injury in penetrating wounds of the abdomen; it can be explained only by supposing that the point of the instrument glides off from their slippery rounded surfaces.

The following is a good illustrative example of this accident:—

M. N. in a fit of severe grief, resolved to put an end to his existence, and for this purpose rushed with all his force against the point of a sword, which he had previously made fast in the wall of his apartment. So completely was the abdomen transfixed, that the point of the sword stuck out for eight or ten inches on the right side of the vertebral column. When M. Dupuytren saw him, he seemed to suffer but little pain; but this might arise either from the insensibility so common in all cases of suicidal mania, or from the circumstance of the instrument not having wounded any of the principal nerves. On examination, there were fortunately no symptoms of any extravasation, nor indeed of a wound of any of the abdominal viscera. It required considerable force to withdraw the sword, and Dupuytren was afraid that some hæmorrhage or extravasation might follow the operation; happily no such accident occurred, and the patient, after repeated bleedings and the employment of a very rigid antiphlogistic regimen, was speedily quite cured."

M. Dupuytren's remarks upon incisions are good, yet we know not that any would be novel or striking to the English surgeon. The papers of Mr. Hutchison, Mr. Lawrence, and others contain, perhaps, more than the Lectures of the Baron, on this important remedy.

M. Dupuytren offers a remark on the merits of English lint and of French *charpie*, to which we may direct a moment's attention. He observes that, in gun-shot wounds, where union by the first intention is neither desirable, nor to be obtained, the *charpie* is preferable as a dressing to our lint; for, the former becomes saturated with the matter which is formed, while the

latter tends to confine it. The remark is very just, and the greater use of charpie in this country, would, we think, be an improvement in our practice. Wherever suppuration is copious, and poultices not applicable, the charpie of the French forms an admirable dressing. The best substitute with which we are acquainted is lint, pulled into shreds.

M. Dupuytren speaks slightly of the chlorides, or chlorates, as a local application in cases of gangrene. We cordially agree with the experienced lecturer; and we really believe that, much as they have been vaunted, they are possessed of little power in any kind of sore. The diluted chlorate of soda or lime is a gently stimulating, and a very cleanly lotion. We fancy this is a tolerably fair expression of its merits.

The feeble therapeutics of France are displayed in M. Dupuytren's incidental advice with respect to the treatment of jaundice. He merely recommends fomentations on the region of the liver.

We see little in the remainder of this series of clinical remarks to attract our attention, or occupy our space. A large portion is exclusively devoted to the consideration of the treatment of tetanus. That nothing new is said, and nothing satisfactory suggested, may probably be expected, and is really the case. M. Dupuytren condemns the practice of amputation, after the tetanic symptoms have appeared. He relates some cases which display its inefficiency, a fact of which the majority of surgeons are sufficiently aware.

We may now proceed to the third volume of these lectures. It contains eighteen articles, devoted to the following subjects:—Cysts developed in the substance of bones—serous cysts, containing small white bodies—the nail growing into the flesh—dislocations of the humerus—vital and mechanical dilatation of the urethra—club-foot—laceration of the perinæum during labour—congenital dislocation of the femur—fistula lachrymalis—ulcer of the rectum—ranula—abscess in the right iliac fossa—the modes of employing the actual cautery and moxa—hydatid tumors in the muscles and the viscera—fracture of the lower extremity of the humerus—exostosis of the superior surface of the last phalanx of the great toe—fibro-cellular tumors of the uterus—tracheotomy.

Some of the preceding subjects are of great, and some are only of minor importance; some have been noticed on former occasions, and some are probably not deserving of particular attention. We proceed to discuss them in their proper order, and shall endeavour to select important particulars, unencumbered with the superfluous or familiar details of a lecture.

ON THE CYSTS DEVELOPED IN THE SUBSTANCE OF THE BONES.*

This is really an interesting, and rather an instructive lecture. The object of the lecturer is to point out the circumstances which constitute the difference between the simple and non-malignant cysts developed in bones, and

* In our analytical notice of these Lectures, we shall adopt a free and liberal interpretation of the text. The translator should allow not merely for difference of idiomatic language, but for national peculiarities of sentiment. The same idea may be differently conceived, as well as differently expressed, by individuals of different nations.

the genuine malignant diseases of their tissue. The reporters congratulate themselves and their readers on the perfect success of their patron. Of this we are not so perfectly assured; but our surgical brethren may decide for themselves.

The bones are the seat of cysts, whose parietes are extremely thin, and composed of bony matter, resembling in its tenuity hammered metal. The contents of the cysts are various—most frequently they consist of a fibro-cellular substance—sometimes of a serous fluid, unmixed or united with the latter—sometimes of a mucous fluid—or of adipocire—or hydatids—or pus and serum—or a jelly-like substance—or teeth—and so on. M. Dupuytren relates instances of some of these varieties; but we need not do more than enumerate them.

These cysts are seated in the substance of the bones. They are seen in the extremities of the long bones, in the bodies of the vertebræ, but most of all in the bones of the face. They are frequently displayed in the horizontal portion of the lower maxilla, in its ascending ramus, in the alveolar process of the superior maxillary bone, in the antrum of Highmore, and in the nasal fossæ. Their form is generally ovoid, occasionally oblong, and it may be flat. Their size is varied, no larger than that of a musket-ball on one hand, and equal to the dimensions of a fist upon the other. The parietes of these cysts are formed at the expense of the bone, in the interior of which they are developed.

The circumstances which give rise to these osseous cysts are in general obscure. External violence, as a blow, has preceded their formation—so has the incomplete extraction of a carious tooth. M. Dupuytren makes some remarks on the influence of the teeth on the production of the cysts. He observes that the latter are occasioned by alterations in the roots of the teeth, and are then most commonly developed in the alveoli of the canine of the upper jaw, where sometimes they attain a considerable magnitude. If, under these circumstances, the affected, or rather the affecting, tooth be examined, its extremity is found altered, surrounded with an osseous deposit, and bathed in the liquid contents of a bony cyst, attached on the one hand to the osseous deposition on the tooth, and, on the other, to the bottom of the alveolar cell. This cyst in general follows the tooth, when the latter is extracted; if left behind, it occasions tedious suppuration. Its contents are a liquid, sometimes very thick, and sometimes serous, and its internal lining membrane is smooth as serous membranes are.

We pass from this imperfect enumeration of the causes, to the symptoms and the diagnosis.

The earliest symptoms are uneasiness or pain; the latter is sometimes acute, and sometimes dull, but rarely of a lancinating character. After an interval, swelling commences, and a tumor of variable size is formed. This is dependent, as has been remarked, on the separation of the laminæ of bone by the cyst. The bony parietes of the tumor are so thin, that they yield beneath the pressure of the finger, and communicate, in yielding, a crackling sensation, resembling that produced by dry parchment. This symptom or sign is regarded by the Baron as pathognomonic. After frequent examination and repeated pressure, it will sometimes disappear, a circumstance which is probably occasioned by the elasticity of the lamina of bone being overcome, and by the lamina itself being temporarily, or even permanently de-

pressed. In this, as in other tumors, exploration by a puncture is always advantageous, in removing doubt or increasing certainty.

The disease with which the osseous cyst is most liable to be confounded is osteo-sarcoma. M. Dupuytren consequently bestows some pains in laying down their distinctive characters.

Osteo-sarcoma, he observes, is distinguished from its commencement by lancing pains—enlargement of the veins—simultaneous implication of the neighbouring parts, whether soft or hard—their disposition to form a fungus, and to constitute a tumor irregular upon its surface. On the other hand, the osseous cysts do not contaminate the surrounding parts; their surface is smooth, and their increase is slow—that of osteo-sarcoma being rapid. The latter kind of tumor is traversed in its interior by spiculæ of bone; this is never observed in the osseous cyst. When we add to these diagnostic characters the crackling of the osseous cyst under pressure, and the information which a puncture can afford, we have run through the principal features of both maladies.

M. Dupuytren adds the following summary.—1. Osteo-sarcoma and the osseous cysts differ, in essential respects, from each other. 2. Osteo-sarcoma is a cancerous affection of the bone; but the cyst is a development of it or in it, owing, in most instances, to the presence of a fibrous body, resembling the fibrous tumor of the uterus. 3. The osseous cyst is seldom or never reproduced, when once completely extirpated; osteo-sarcoma, like other malignant tumors, most commonly returns after any kind of operation. The osseous cyst is usually, as has been stated, slow in its progress—sometimes, however it is rapid, and sometimes it may even be stationary. After an uncertain period, the osseous cyst is convertible into a malignant structure, especially into such as exhibits a fibro-cellular character.

The facility with which the osseous cyst is replenished or regenerated, when merely opened, or imperfectly removed, is displayed by one remark, and two conclusive cases. Before we pass to the prognosis and the treatment, we shall venture to offer one or two observations. It appears to us, that M. Dupuytren deserves our thanks for drawing attention, in so marked a manner, to the frequent existence of cysts, or encysted tumors, in bones, which, however serious, are not so malignant as genuine cancer. Most hospital surgeons were, we fancy, aware that diseases of this nature occasionally arise, and that operations for them are more successful than in cases of scirrhous or fungus hæmatodes. The maxillary bones have been partially, or even totally, removed by English and by foreign surgeons, for cysts of the nature described by M. Dupuytren; and probably few museums are deficient in examples of it.* Yet we do not feel convinced of the strict propriety of the diagnostic marks laid down by the Baron, nor are we quite assured that it is always so easy as the reporters hint, to draw the distinction between the non-malignant osseous cyst, and the really malignant fungoid tumor. We recollect the case of a young woman, who was under Sir Benjamin Brodie's

* There is a splendid specimen of this affection of the ascending ramus of the lower jaw in the surgical museum of St. George's Hospital. The disease was removed in a masterly manner by Mr. now Sir B. C. Brodie. The patient died of erysipelas. The cyst is chiefly cartilaginous or fibrous, with here and there scales or patches of ossific matter.

care in St. George's Hospital. There was a tumor of the upper jaw, which protruded in the situation of the antrum, encroached upon the nose, and projected in the mouth, and displayed, in a very characteristic degree, the crackling alluded to by M. Dupuytren. A puncture was made by Mr. Brodie, but blood only was discharged, and other circumstances made it too probable, that the malady was fungus hæmatodes.

One of the cases related by M. Dupuytren himself is calculated, we fear, to confirm our suspicions.

Case. A young girl, about seven years of age, was taken to the Hôtel Dieu, on account of a tumor in the superior maxillary bone. It was equal in size to the fist—the right nostril was obstructed, the eye protruded forwards, and the palatine arch pushed upwards and aside. The disease had followed a blow upon the cheek, some time after the reception of which pains had been experienced, and swelling had succeeded. The child had decidedly lost flesh. M. Dupuytren was inclined, in the first instance, to believe that the disease was osteo-sarcoma. But the discovery of “the pathognomonic symptoms” of an osseous cyst relieved his alarm and dispelled his suspicions. On compressing the anterior and superior portion, of the tumor, it first yielded, and then returned to its original condition, with the crackling similar to that of parchment. The same thing was observed in the bony palate. M. Dupuytren was re-assured. He made an incision into the tumor, through the mucous membrane of the lip—black blood only escaped. He introduced the finger through the wound—it passed into a soft substance, easily torn, which had expanded the bone, but was not confounded with it; in fact, the finger distinguished the existence of osseous parietes, firm in some parts, thin in others. On the next day, the patient was carried to the operating theatre, and an incision was made into the most dependent portion of the tumor. About two ounces of blood escaped, and M. Dupuytren detached with the finger a portion of the substance that filled the cyst. Injections were subsequently used, and, in ten days after the performance of the operation, the tumor was greatly diminished in size. M. Dupuytren hoped that, if the tumor continued progressively to decrease, a cure might be effected.

We fear that the English surgeon would regard this case as one of malignant tumor, the escape of blood only when a puncture was made, and the soft contents of the expanded bone, presenting two of the important features of fungus hæmatodes. We feel disposed, as we have stated, to doubt the strict justice of the distinction, which M. Dupuytren has laid down, between the non-malignant cyst and the malignant tumor. We fear the transition is too gradual to permit the abrupt and decided line. Yet still the remarks of the Baron are valuable, and, if they cannot be received implicitly, they are at least a fair approximation to the truth.

We now proceed to the treatment of these osseous cysts. Their destruction is required.

In the greater number of cases, it is necessary, in the first instance, to puncture the tumor, in order to ascertain the actual nature of the contents of the cyst. This having been done, an incision must be made into the tumor, and, if the cyst is seated in the face, the inside of the mouth should be selected for the wound. If the contents are solid, they should be extirpated,

and the use of the actual cautery is frequently demanded. The contents of the cyst having been removed, the latter should be dressed in freely with lint, and emollient or irritant injections should be employed, as circumstances may require. Inflammation of the parietes of the cyst is thus produced, and the membrane which lines it is destroyed; after this, the parietes contract upon themselves, and a cure is effected after a longer or shorter space of time. In some cases, it is necessary to make a counter opening, and to carry a seton between the two wounds.

Such is M. Dupuytren's treatment of these osseous cysts. We have doubted if they may not be more frequently malignant than M. Dupuytren supposes, and we doubt, in continuation, if the treatment he advises will be commonly efficient. We are sure that, in an instance of osseous cyst of the lower jaw, which we have witnessed, the attempt to cure the malady by opening the tumor, and exciting inflammation of its interior, would have almost been preposterous. But we bow to the Baron, and proceed to the next article.

ON SEROUS CYSTS, CONTAINING LITTLE WHITE BODIES IN THEIR INTERIOR.

The analysis of Mr. Brodie's work, which forms the article, in our present Number, immediately succeeding this notice of M. Dupuytren's lectures, displays the sentiments of Mr. Brodie on inflammation, and other diseases of the mucous bursæ. In that article will be found Mr. Brodie's description of numerous small bodies, resembling melon-seeds, which the bursæ frequently contain.*

When the inflammation of a bursa mucosa, says Mr. Brodie, is of long standing, it is not unusual to find floating in the fluid of the bursa a number of loose bodies, of a flattened oval form, of a light brown colour, with smooth surfaces, resembling small melon-seeds in appearance. There seems to be no doubt that these loose bodies have their origin in the coagulated lymph, which was effused in the early stage of the disease; and Mr. Brodie has traced the steps of their gradual formation, from irregular masses of no determined shape, to smaller portions, and, ultimately, to the flat, oval bodies described. Motion and pressure are the agents of change.

Such is the passage which our readers will find a little further on, in our review of Mr. Brodie's admirable volume. These peculiar substances contained within the bursæ, or, as M. Dupuytren terms them, in serous cysts, form the subject of the lecture now before us. We shall not pursue the lecturer through his lengthened cases and his trivial details, but select only such as are necessary to supply a consistent account of the complaint.

He observes that, before M. Cruveilhier published his Essay on Pathological Anatomy, very little was known respecting this affection. On this, as on many other occasions, M. Dupuytren has displayed his profound ignorance of the state of surgical science in this country. Mr. Brodie and Mr. Brodie's work had rendered the profession familiar with the complaint long before M. Cruveilhier's Essay saw the light. Nay more—we shall

* Vide page 350 of this Number.—Eds.

soon shew that M. Dupuytren's ideas upon the subject are much less rational than those of Mr. Brodie; for he (M. Dupuytren) actually believes that the small white bodies are genuine hydatids, whilst he does not appear to be properly aware that the "serous cyst" is no other than a bursa.

M. Dupuytren observes, that the disease is usually remarked on the palmar surface of the wrist, beneath the anterior carpal ligament; sometimes however, it is noticed on the ankle, beneath the anterior annular ligament; and, in some rare cases, it has been observed on the olecranon—on the acromion—situated over the tuberosity of the ischium—and behind the great trochanter.

Falls, blows, pressure, distention, and repeated friction, are the usual causes of the malady.

M. Dupuytren's description of the foreign bodies is minute. He says that they are whitish, transparent, folded in their long diameter, forming a kind of pouch, of which one extremity is terminated by a broad and rounded cul-de-sac, whilst the other is elongated like the neck of a bottle, and finished off in the form of a sucker or mouth! They are evidently composed of laminae, super-imposed upon each other. Their form is sometimes nearly cylindrical—sometimes conoid—and sometimes it is lenticular. Some are small, others large, and they seem to pass through several phases before they arrive at their mature development. Their consistence is almost cartilaginous; but M. Dupuytren thinks he has discovered a cavity in their interior. These whitish bodies are inclosed in a thin, smooth, yellowish, and serous cyst, containing transparent serosity.

Some of these bodies were sent to M. Bosc, a member of the Institute, in order to be submitted to a careful examination. He arrived at the conclusion, that they are not hydatids, nor any other description of animal, but merely debris of fatty cellular tissue, swimming in serous fluid. M. Duméril arrived at the same conclusion.

M. Dupuytren remarks, that it is easy to convict these naturalists of a blunder. For, says he, when they are compressed (the little bodies, not the naturalists) between two portions of blotting paper, no appearance of grease can be observed. Their constancy of form and their lamellated structure induce him to believe, that they enjoy a distinct and individual existence, and he thinks, what would be very important if true, that he has seen several of these bodies move.

We need scarcely say, that we believe M. Dupuytren to be totally wrong, and Mr. Brodie and the naturalists to be right. We know that Mr. Brodie has carefully and often examined these bodies—that many others have examined them too—and that their firm and unanimous opinion has been against their hydatid nature. We have frequently regarded them with a lens ourselves, but never did we recognize mouth, or cavity, or motion. M. Dupuytren's microscope must, we fancy, be a good one, to allow him to perceive these conclusive properties.

There are two circumstances connected with the symptoms, on which M. Dupuytren lays especial stress.

The first has reference to the form of the cyst. It is always bisected in the middle, so as to constitute a double tumor, the portions of which are nearly equal. The second symptom is this—pressure upon either causes

the fluid to pass into the other portion, in doing which, a kind of crepitus is evident. This is the pathognomonic sign of the presence of these bodies in the cyst.

The Baron's statement is partially true, and partially erroneous. The tumor is not always bisected. M. Dupuytren does not appear to be aware that any bursa may contain these substances. We have seen them in the bursa over the patella. The division of the tumor into two portions is the consequence of the disposition of the neighbouring parts. The bursa on the palmar aspect of the wrist extends, as is well known, above and below the transverse ligament. When distended by effusion, the unyielding ligament binding it down gives rise to the projection above and below. The same thing occurs on the front of the ankle. But over the patella no tendon nor ligament can exert compression, and there the tumor is globular or oval. Yet the crepitus is as distinct as in the wrist or on the ankle. We lately saw an instance of enlargement of the bursal sheath investing the internodial muscles on the posterior aspect of the radius. The tumor was irregularly oval, but presented no contraction in any part. The peculiar crackling attendant on the presence of the melon-seed like bodies was remarkably distinct. We punctured the tumor and they freely issued from the opening. From the preceding observations it will, we think, be apparent that the Baron has committed a serious mistake, in considering division of the tumor into two portions as a feature invariably present. He has also, it would seem, been guilty of an omission, if not of an error, in not mentioning the fact that the "serous cysts" are usually no other than enlarged bursæ, or bursal sheaths investing the tendons.

The remaining remarks to which we shall direct attention are important, because connected with the treatment.

M. Dupuytren insists on the necessity of a large opening. When the tumor is bilobed, the incision should be made into either half. The necessity of a free incision is apparent when we recollect the anatomical relations of the cyst. On the ankle, and especially on the palmar surface of the wrist, the cyst is seated beneath the fascia, in the midst of tendons, vessels, and nerves, and surrounded by a fibrous cellular tissue. If a small opening is made, inflammation and suppuration occurring in the cyst give rise to swelling: to strangulation by the fascia and the tendons: to diffusion of matter along the sheaths of the tendons and the vessels in the hand, the forearm, and the arm: and to all the consequences which such mischief may occasion, among which death itself must be enumerated. When a large incision is practised in either half of the cyst, such disastrous results are less likely to ensue, for the matter which may form obtains a ready exit.

These free incisions having been performed, and the fluid and small bodies contained within the cyst having been set free, a portion of lint is to be introduced between the lips of both the wounds.

M. Dupuytren was once in the habit of using a seton, which passed from one to the other opening. This, however, he found so dangerous, that experience compelled him to abandon it. The inflammation that ensued was violent and extensive, and yet the hazard was unattended by any corresponding quantum of advantage over the simple introduction of lint. We may notice a case related by the Baron, in order to display the perils of the

seton. We have lately witnessed a fatal result from the use of the same means, in an instance of enlarged bursa over the inferior extremity of the scapula.

Case. A carpenter, æt. 35, first observed a tumor on the anterior aspect of the right wrist in the early part of 1813. It was a serous cyst, compressed about its centre by the transverse carpal ligament. It produced such inconvenience, that in June, 1814, he placed himself under the care of M. Dupuytren. The Baron made an incision in each portion of the tumor, discharged a number of the melon-seed-like bodies, divided the fascia so as to diminish the risk of strangulation, and passed a seton between the two openings. Severe pain ensued in the night succeeding the operation—swelling followed, and increased till the fourth day—and dirty-coloured, flaky suppuration was established. On the fifth day the seton was removed.

The inflammation spread up the arm to the axilla, and the general symptoms became severe. On the eighth day, the sloughy fascia was divided an abscess between the first and second metacarpal bones was opened—and compression was applied to facilitate the discharge of matter which extended to the hand and up the forearm. On the tenth and eleventh days there were rigors—irremediable prostration followed—and the fifteenth day was the patient's last.

M. Dupuytren concludes the article with an injunction not to urge the performance of an operation, no matter of what kind, unless the disease be extremely inconvenient. Under any circumstances, the patient should be told of the risk that waits on surgical interference. It would be equally foolish and improper on the surgeon's part, to promise at the same time immunity from danger, and certainty of cure. It must be owned that operations on the bursal sheaths are always attended with considerable hazard. The superficial bursæ may be meddled with more safely.

ON THE NAIL GROWING INTO THE FLESH.

The designation of this complaint is not perhaps unexceptionable or correct. It is, however, understood, and that will answer our purpose for the present.

M. Dupuytren remarks that, looking on the malady with a curious eye, he soon discovered the existence of two important varieties, requiring each a peculiar mode of treatment.

The first variety consists of ulceration of the skin at one of the lateral borders of the nail, or even in some distances at both; when on one, it is usually on the outer side. A little reflection will readily explain how a tight or ill-made shoe may press the edge of the nail into the skin, and produce inflammation, with its consequences. Such is, in fact, the general mode in which the affection is produced.

The complaint almost always commences at the angle where the lateral and anterior border of the nail unite. This appears to M. Dupuytren to be owing to individuals neglecting or avoiding to meddle with that angle when cutting their nails. Allowed to grow, almost undisturbed, it constitutes a point which runs into the flesh, and gives rise to the commencement of an

ulcerative process, that subsequently extends the whole length of the lateral border of the nail.

Of the symptoms of this very painful affection we think we need not speak. They are usually too obvious to escape the observation, or deceive the judgment of the patient or the surgeon. Yet M. Dupuytren relates a case, in which they were mistaken and treated for gout, during the lengthened period of eight years.

M. Dupuytren reviews the principal methods of treatment adopted, and concludes by enumerating the superior advantages possessed by his own. We shall disregard his criticism, and attend to his advice.

After diminishing by fomentations and by other means the general inflammatory condition of the part, the Baron passes the point of one blade of a pair of scissors under the centre of the free edge of the nail. By a rapid thrust the blade is carried back as far as the root of the nail extends, and the scissors are made to divide the nail into two lateral halves. That corresponding to the side affected is then seized with a pair of dissecting forceps, and torn or twisted off by a kind of rotatory motion, directed from the centre of the nail towards its side. If the other side of the toe is affected, the other side of the nail is removed. If fungous granulations exist, they are liberally touched with caustic. Appropriate dressings are afterwards applied, and cicatrization rapidly ensues. In general, the nail is not reproduced in old persons, but sometimes it is found to be regenerated in young ones.

The kindly eye of parental attachment is obvious in the following declaration. It *might* be supposed, observes the Lecturer, that the treatment just described would be very painful; but patients, notwithstanding, seldom cry out, when compelled to undergo it. If not a word was ever uttered, we think it would be difficult to convince one human being, that slitting up his toe-nail with a pair of scissors, and forcibly twisting off either half, is not most intolerable anguish. Whatever M. Dupuytren may believe, his process is abominably violent and painful.

We have treated many cases of this complaint, and we never employed, nor do we think we would advise, the treatment resorted to by M. Dupuytren. We have not in any instance failed to remove the complaint effectually, by means of the following more gentle management. The affected side of the nail must be scraped, in order to render it as thin as possible. The fungous granulations should then be touched with caustic, for the double purpose of affording room and diminishing their excessive sensibility. These preliminaries having been adopted, the surgeon should gently and gradually raise the edge of the nail, with the flat end of a small eye-probe. The loose and elevated portion is to be removed by means of a pair of dissecting scissors. The surgeon must proceed with this process of raising the nail and removing it, until he gets beyond the existing fungus, and arrives at the connexion of the nail with the sound cutis. Here he is to stop, for where the fungus is, the nail is necessarily separated from the cutis: and where the latter is connected with the nail, there can be no fungus, and consequently no disease. The remaining fungus should now be freely destroyed with lunar caustic, and dry lint should be applied. At the subsequent dressings the nail should be gently and gradually loosened from the cutis, so as to admit dry lint beneath its edge, which is to be cut and kept cut, in order to prevent its approaching the wound, or even the cica-

trix. Such is the method which, in our own case, as well as in that of many others (for in hospital practice the complaint is common), we have found attended with little pain and with complete success. No doubt M. Dupuytren's is equally successful, but then it is cruelly severe.

The second variety of this affection next engages the attention of the lecturer. His observations on this subject are extremely good, and cannot be materially reduced.

We have seen that, in the first variety, the nail presses in upon, irritates, and inflames the soft parts at its side. In that variety, the initiative is, therefore, seated in the nail. But in the one to which we now proceed, it is the cutis which is primarily diseased, and the nail is affected in a secondary manner.

This affection commences at the base of the nail, in the skin which forms its matrix, and from which it grows. A few words on the anatomy and growth of the nail will, probably, not be misplaced.

The base or adherent extremity of the nail is implanted in the skin in a particular manner. The cutis having reached a little way over the nail upon its dorsal surface, is reflected to the posterior border of the nail, under which it proceeds to form the plane on which the nail is laid. The cuticle, however, instead of passing beneath the nail, is reflected back for a shorter distance than the cutis, and becomes continuous with the external lamina of the nail itself. Thus, the base of the nail is received in a kind of groove of the cutis, which is termed its matrix, and out of which it grows. The variety of disease which we are now considering, is essentially an affection of this portion of cutis. From some cause or other it inflames and ulcerates, the ulceration displaying a semilunar form, with hard and elevated edges, and a deep red, or livid and violet colour. The nail is shortened, and reduced, perhaps, to half its extent, or even totally removed. In its place, some portions of a horny sort of substance are seen to spring up here and there: and frequently a portion of the nail is found concealed beneath the fungous granulations. The latter are, as we observed, confined to the base of the nail and its vicinity.

The colour of the nail, when it remains, is altered to a grey or to a black tint. Sometimes it is loose. The wound is generally bathed in a sanious or bloody suppuration, which, conjointly with the natural secretions of the parts, secretions in these patients always offensive, gives rise to an odour so insupportable, that other individuals are incapable of living with them. The attempt to walk, or even to stand, is productive of great pain, and occasions bleeding of the fungus. Any kind of shoe is perfectly unbearable.

The preceding symptoms are displayed in most cases, with little variation. In a few, however, the disease appears more particularly to affect the portion of the skin which is immediately subjacent to the nail. In instances of this description, this organ is observed to be raised by small tumors, of a fibrous, cartilaginous, osseous, or, perhaps, of a vascular nature, which give rise to suffering, in proportion as the pressure upon them is considerable.

The treatment required for the first variety of the complaint is quite insufficient for the removal of this. The disease is in the cutis; the removal of the nail will not remove that which the pressure of the nail has not oc-

casioned. In short, the affected portion of the cutis must be thoroughly dissected out. The measure is severe, but it is necessary.

M. Dupuytren puts his patient on a bed or chair, and makes with a scalpel a deep semicircular incision, three lines, or thereabouts, beyond the matrix of the nail, parallel to which it is directed. The affected portion of skin is then dissected off, by proceeding from behind forwards, the nail, if it remains, being necessarily removed with it. If any pieces of a horny substance still exist, they also are necessarily removed, till not a vestige of a morbid structure can be seen. All the white-looking and fibrous portions, marked at the bottom and towards the angle of the wound, should be carefully removed, for otherwise they may reproduce the nail, and re-establish the disease.

Mild dressings should be afterwards applied, and the usual means to avoid inflammation, afford relief to pain, or expedite the healing process, should be had recourse to. If any appearances of horny matter are at any time presented, the knife must immediately remove them. After cicatrization, the skin, when examined, is found to be smooth, but thick, and sometimes of a horny consistence. In conclusion, M. Dupuytren offers the following brief resumé.

1. In general, when the nail is the seat of alteration, it presses injuriously on the neighbouring skin, and constitutes the disease denominated—"the nail growing into the flesh." The removal of the nail is the only successful method of treatment.

2. The disease which is characterized by inflammation, in the first instance, of the skin which serves as matrix for the nail, is distinct from the preceding in its symptoms, its results, and the treatment which is necessary. The best and the quickest method of cure is to remove the whole diseased skin with the knife.

3. In every case of either disease, we must not lose sight of antiphlogistic or other remedies, which, according to circumstances, are always of service, and may sometimes obviate the necessity of resorting to a painful operation.

ON DISLOCATIONS OF THE HUMERUS.

The able work of Sir Astley Cooper has made the subject of fractures and dislocations too familiar to the English reader to admit of much further illustration at present. Sir Astley has stated the leading facts so forcibly and clearly, that the vividness of the impression produced by his descriptions is rather diminished than increased by trifling subsidiary details. We shall not, therefore, analyse the lengthened lecture of M. Dupuytren on luxations of the humerus, consisting, as it does, of nearly seventy pages, but shall select such portions as express the result of the Baron's experience on disputed points, or seem to present some novel views, or some hitherto unheeded facts.

M. Dupuytren remarks, that surgeons have denied the existence of incomplete dislocations in ball and socket joints; but that morbid anatomy has displayed their incorrectness. In 1824, the surgeon in chief of one of the hospitals in Paris presented to the Academy a preparation, taken from the body of a man who had died eight months after dislocating the humerus. A new socket had occurred, partly formed by the glenoid cavity of the scapula, and partly by a small portion of the surface of the ribs, whilst the head of the humerus was grooved, to receive the anterior edge of the glenoid cavity. This disposition gave rise to a kind of ginglymus joint. During life, the individual had only the power of slight motion forwards and backwards of the arm. The surgeon who reported this fact to the Academy saw the softened head of the femur, in a case of spontaneous dislocation, lying and fixed on the anterior border of the acetabulum.

The incomplete luxation of the femur, in cases of disease, has, we think, been sufficiently known in this country. But, in instances of that description, the acetabulum and its margins are usually altered. Sir Astley Cooper unless our memory belies us greatly, has described with some minuteness an incomplete luxation of the head of the humerus, which is placed on the margin of the glenoid cavity and the coracoid process. The reported good offices between Sir Astley and M. Dupuytren should have brought this circumstance to the memory of the latter.*

The distinctions between the symptoms of luxation of the humerus into the axilla, and fracture of the cervix of the bone, are sometimes so obscure, as to require much experience and the utmost care to effect their discrimination. The remarks of M. Dupuytren are deserving of attention.

Every one, says the Baron, affected with a dislocation or fracture of the upper extremity of the humerus, has received a fall on the same side of the body.† But the situation and position of the limb, at the moment of the fall, differs in two cases, and the difference usually decides the nature of the accident that is to follow. If the extended arm has been carried forwards or behind, to break the fall, the consequence is dislocation; but, if the arm has been retained in apposition to the side, and the fall has occurred on the shoulder itself, fracture of the head, or of the upper part of the humerus, ensues.

On this statement we would make one observation. In many, perhaps in the majority of instances, the patient is aware of the manner in which he received the accident, and can remember if he fell on the hand or on the

* The following story of M. Dupuytren and Sir Astley has been told. When the former was in London, and accompanied Sir Astley round the wards of Guy's Hospital, he saluted the worthy Baronet, on parting, in the Continental fashion, with a kiss. Sir Astley blushed, but turning to the laughing students observed, with a wink, that he had had the advantage of the Baron, for, in Paris, he had kissed his daughter. The anecdote is characteristic, and may be true.

† This is not strictly correct. Dislocations of the head of the humerus have occurred in consequence of the application of some sudden extending power to the hand. A boy, for instance has been holding a horse by the bridle, when the animal, suddenly raising its head, has occasioned dislocation of the head of the humerus into the axilla. The rationale must be obvious.—Eds.

shoulder, with the arm close to or away from the body. But it is also far from unfrequent, to find that the accident has been of such a character as to prevent the individual from knowing, or from recollecting, these minute particulars. A man, for example, falls from a height, and dislocates his shoulder. He is bruised in many places, and of course it is impossible for him, or for the surgeon, to determine by the history, or by any trivial difference in the marks of contusion or of violence, whether the humerus has been dislocated or broken. We are convinced, too, that the fact is not always as the Baron states it. We have seen dislocation of the head of the humerus occasioned by direct injury to the shoulder, and we would caution the inexperienced surgeon against attaching implicit confidence to this species of diagnosis. It is certainly an assistance, frequently a great one; but it must not be received for more than it is worth.

To return to the remarks of M. Dupuytren. In the case both of fracture and of dislocation, there is pain in the shoulder, and the patient always thinks that the fall has been upon it. When the pain, however, is occasioned by a dislocation, and the fall has taken place on the palm of the hand, the latter bears evidence of such having been the case, in the shape of dirt, excoriation, or bruises; but if fracture has occurred, and the shoulder itself has been the stricken part, the tearing or soiling of the clothes which covered it, and the marks of injury on the shoulder itself, are equal evidence of the nature of the accident. In dislocation, the pain is produced by the laceration of the fibrous capsule and contiguous parts; in fracture, by the bruises of the shoulder, and the injury inflicted by the lower extremity of the bone.

Ecchymosis is observed in both species of accident. In dislocation, it is comparatively rare, and, being produced by the tearing of the ligament, and by internal injury, it is situated on the inner and anterior part of the arm. In fracture, on the contrary, this symptom is almost invariably present, and is found on the shoulder itself.

In both accidents, the acromion projects, a hollow is felt beneath it, with flattening of the deltoid, and a prominence is felt in the axilla. The projection of the acromion, and the flattening of the deltoid, are greater in dislocation than in fracture, in the latter of which the muscle seems shortened, and, as it were, swollen. The hollow under the acromion is greater, also, in dislocation than in fracture, and the prominence in the axilla is more distinct. In dislocation, the prominence feels rounded—in fracture, it is more irregular.

Mobility of the limb and crepitus do not exist in dislocation, whilst they are easily recognized in fracture. The crepitus is most apparent when the humerus is rotated upon its axis. The experimentum crucis of a fracture or a dislocation is, perhaps, the attempt to effect a reduction. After the reduction, the limb is readily retained in its position, in the case of dislocation; but particular care, and an apparatus, are required to maintain it properly when a fracture has occurred.

M. Dupuytren observes that fracture, without displacement, is occasionally mistaken for a violent bruise upon the shoulder. The crepitus and mobility, distinguished by rotation of the humerus at the elbow, afford the only means of diagnosis. The lecturer properly points out a source of fal-

lacy, which frequently misleads inexperienced surgeons. In severe contusions of the shoulder, as of other joints, a kind of crepitus is occasionally noticed, although no fracture has occurred. M. Dupuytren asserts that this is occasioned by inflammation of the articulating surface of the joint, and consequent deficiency of synovial secretion. Now this appears to us to be a bad explanation. For no other symptom of inflammation of the synovial membrane is presented in these cases, and if such inflammation did exist, secretion would probably be increased rather than diminished. A more consistent rationale will be found in the belief, that either blood or lymph is effused in the textures external to the joint, and that motion of these textures gives rise to the phenomenon.

M. Dupuytren relates some cases, but the subject has probably been sufficiently pursued.

The symptoms and the treatment of old, unreduced dislocations, occupy the attention of M. Dupuytren, and may not unprofitably attract our own. With respect to the symptoms, little need be said. The diagnosis is sometimes very difficult, and must be principally formed through the medium of a practical acquaintance with the characters of dislocations in their early stage. M. Dupuytren lays particular stress on the following features:—The elongation of the arm—the lengthening of the anterior border of the axilla—deformity of the shoulder, and facility of producing a depression in the deltoid by pressure with the fingers.

The treatment of dislocations of some standing contains the interesting and important problem—what lapse of time is sufficient to render attempts at reduction improper?

Surgeons have differed widely on this point, and the ancient practice is strongly contrasted with the modern. Benjamin Bell, even, was of opinion, that reduction should not be tried, if some days had elapsed after the occurrence of the dislocation. His advice has been condemned by judicious boldness, and the consequence has been, the accumulation of a mass of facts in opposition to it. By those facts, or at least by a portion of them, M. Dupuytren attempts to arrive at some determinate conclusions. Before we proceed to them, it is necessary to clear away an obvious objection that almost unavoidably presents itself to the mind, when reflecting on this subject. We allude to the possibility of injury being inflicted on the vessels and the nerves in the vicinity of a joint, from the violence indispensable to effect the reduction of a dislocation of long standing. That reasonable supposition would seem to be supported by a memoir, published by M. Flaubert, surgeon to the Hôtel Dieu of Rouen. In that memoir are contained some extraordinary instances of mischief and disaster. Some six or seven years ago, we noticed the Memoir in this Journal; but we think it would be well to present, as M. Dupuytren has done, an abstract of the cases related by M. Flaubert. They are calculated, at all events, to read to the incautious or the inexperienced surgeon a lesson of gentleness and prudence.

Case 1. The patient was a sturdy sailor, æt. 57. The head of the humerus was dislocated under the pectoral muscle; the dislocation had existed for eleven days. The reduction was effected in the following manner. The

patient was seated in a high chair, extension was made from the wrist, whilst the counter-extension was effected by a roller, passed under the armpit, the ends crossing over the opposite shoulder, and fixed to a staple in the wall. A ball was kept in the hollow of the axilla, to lift up the head of the bone at the instant of reduction. The extension was made by eight intelligent pupils, M. Leudet taking the management of the arm. At the first attempt, the head of the bone was dislodged from its place, and brought into the axilla; the second trial was followed by its complete reduction. An enormous swelling took place, almost immediately, beneath the pectoral muscles. The face became pale, and covered with sweat—the lips livid, and the pulsation in the radial artery ceased. A pulsating tumor formed in a few days in the axilla—gangrene of the limb succeeded—and, in a fortnight after the reduction the patient died.

Dissection. Hand and inside of the arm in a state of gangrene. The pectoralis major was almost completely torn across, and its fibres were separated by clots of blood. The upper portion of the short head of the biceps was ruptured also. All the muscles of the arm, shoulder, and outside of the chest, were infiltrated with blood. Between the pectoralis minor and latissimus dorsi, there was a large clot, on removing which, the axillary artery was found to be fairly torn across, a little above the origin of the subscapular. In order to discover the upper end of the vessel, it was necessary to dissect the subclavian, which was enlarged, as were the branches which arise from it. The axillary artery lay beneath the pectoralis minor, upon the rib, to which it adhered by means of coagulable lymph. This end of the vessel was narrowed, and the thoracic nerves flattened. The second rib was depressed, its periosteum slightly absorbed, and the bone itself a little rough. The head of the humerus was somewhat flattened at the part corresponding to the rib: the capsule was torn—the cartilage rough and ulcerated in parts. The inner margin of the glenoid cavity was fractured.

Case 2. Madame G. æt. 64, dislocated the head of the humerus into the axilla, by a fall, on Nov. 27th, 1823. Reduction was effected in the usual manner, by five assistants, seven weeks after the accident. The first attempt, which lasted seven or eight minutes, was unsuccessful; a second, and shorter one, effected the reduction, during which, the patient felt as though something "gave way" on the inside of the wrist. The patient was now found to be hemiplegiac on the right side. There was no motion, and sensation was very slight, especially in the arm. The eye of that side was half-closed, and there was a slight ecchymosis on the foot and lower third of the leg. M. Flaubert, considering the hemiplegia to be dependent on some extravasation within the head, produced by the agitation and violent efforts of the patient during the operation, bled her immediately. Purgatives were given, and rubefacients, with blisters, applied. The symptoms disappeared in part. In three months the leg was free from paralysis, but a degree of numbness and susceptibility to fatigue remained so late as February, 1826, the date of the last visit. The head of the humerus seemed to be drawn forwards, its motion was imperfect, the patient not being able to lift the hand to the mouth. The hand was useless, the thumb being extended, the other fingers

semi-bent. The ring and little finger were quite insensible, and the heat of the limb appeared to be diminished.

Case 3. F., æt. 70, dislocated the head of the left humerus into the axilla, on Nov. 1st, 1825. Five weeks afterwards, M. Flaubert accomplished the reduction after two attempts. The patient immediately became affected with great constriction of the chest, a sense of suffocation, and the face became purple and injected. These symptoms were followed by an emphysematous effusion, stretching from under the clavicle, across the shoulder, to the middle of the back, where it gradually disappeared. The patient was pale, and the pulse weak, with nausea. In the left thigh and leg there was a sensation of cold and great numbness; the least touch upon the thigh caused exquisite pain. The patient was placed in bed, when she fell into a state of syncope for about an hour, on recovering from which, she complained of imperfection of vision, severe head-ach, and loss of motion in the right arm. Paralysis of the bladder, and of the upper and lower extremities of the left side, succeeded—difficulty of breathing followed after—sloughs formed upon the sacrum—and the patient died comatose on the 18th day after the reduction of the dislocation.

Dissection. The pectoralis major was bruised by the roller used for counter-extension, indeed, on the inside the fibres were reduced to a kind of reddish-brown bouillie. On the outer border of this muscle was a cavity containing bloody serum. All the nerves of the arm were united in a mass in the axilla by means of condensed cellular tissue, a circumstance apparently owing to the pressure produced by the head of the bone. On approaching the scaleni muscles, the four last nerves which go to form the axillary plexus, namely, the 6th, 7th, and 8th cervical, and 1st dorsal, were found torn from their origin in the spinal marrow! The brain and its membranes were sound. On opening the vertebral canal the dura mater was of a reddish brown. The tunica arachnoides was injected, particularly in the neck. The spinal marrow at this part presented a range of white spots, marking the place from which the roots of the nerves had been torn. The medulla at this point was thicker than natural, and of the consistence of a reddish-brown bouillie, the grey matter not being distinguishable from the white. The filaments were rather red and injected.

Case 4. A woman, æt. 45, dislocated the forearm backwards. No attempt at reduction was made till Dec. 9th, 1826, twenty-seven days after the accident, when it was attempted with the aid of seven pupils. Two such efforts were unsuccessful. The patient was then bled, and extension being made again, the ulna slipped into its place, whilst the radius which remained behind was easily pressed by the thumb into its situation. At the instant of reduction, a diminution (*étrangement*) of the elbow-joint took place, whilst a projection appeared above and below it. This was accompanied with a sound like that produced by the tearing of parts, and it seemed to those present, that the muscles which surround the articulation, with all the parts excepting the skin, were rent across. A considerable swelling followed, with a disposition to continual fits of syncope, whilst no pulsation could be felt in the radial artery. The pulse, however, returned next day,

and the swelling gradually subsided. On the 26th December, she had an attack of pain in the right side of the chest, which was relieved by leeches. On the 4th January she left the hospital, having tolerably free motion of the arm, none in the forearm, and but little mobility in the finger.

Case 5. The dislocation was that of the head of the humerus into the axilla, and had occurred fifteen days before M. Flaubert attempted its reduction. Before this could be effected, the operators were obliged to desist, in consequence of the patient's complaining of excessive pain in the wrist, with loss of motion in the hand and fore-arm, and numbness of the whole of the left lower extremity. Considerable constitutional irritation, and a severe attack of fever followed, whilst there took place, after a time, infiltration of the arm and fore-arm near the elbow, which lasted for several months. Subsequently, a slight power of flexion and extension were remarked in the fingers, but it did not increase. The fore-arm, at the time of the report, 1827, could be bent to a right angle with the arm, but there was much pain in the former, the neck, and the wrist; the whole limb, in fact, was wasted and useless.

Case 6. A man, æt. 40, received a dislocation of the left femur, the head of which rested a little above the great sciatic notch. Reduction was almost immediately effected by M. Flaubert. Two days after the accident the thigh became swollen, and the hip painful. The swelling extended to the knee, low fever was established, and on the fifth day after the operation the patient died.

Dissection. A large ecchymosis beneath the skin at the anterior and outer part of the thigh; rupture of the pyriformis, gemelli, and quadratus femoris muscles. The capsule torn, as was the ligamentum teres, close to the head of the femur. In the cavity of the joint there was a quantity of reddish pus, which communicated through the rent in the capsule with a depôt of bloody pus situated between the pectineus and adductor muscles. All the great organs were sound.

The perusal of the preceding cases will, we fear, give rise to opinions not highly favourable to the caution and judgment of M. Flaubert. An unlucky man might meet with an untoward case, but few surgeons of even the most vast experience have been visited with such a series of ugly accidents. In short, we conceive there can be no doubt that M. Flaubert used unwarrantable violence.

M. Dupuytren seems to participate in this opinion, though the judgment of the surgeon and the critic is varnished by a faint expression of regret at the bad fortune of M. Flaubert. Indeed the results of this gentleman's operations would seem to be cleverly and discreetly adduced as a foil to the more fortunate manipulations of the Baron. However this may be, a statement of the results of operations for reduction, in thirty-three cases of old dislocations, deserves the attention of the surgical reader.

Of the thirty-three cases twenty-five were instances of dislocation of the head of the humerus in various directions—five of dislocation of the femur—and three of that of the fore-arm.

Of the thirty-three dislocations—

5	were reduced from the 5th to the 10th day.
6	10th to the 20th.
4	20th to the 30th.
5	30th to the 40th.
5	40th to the 50th.
2	50th to the 60th.
0	60th to the 70th.
2	70th to the 80th.
2	80th to the 90th.
1	90th to the 100th.
1	at the end of 2 years.*

The formidable number of twenty-six are drawn from the private and the public practice of M. Dupuytren. The dislocation of most brief duration had lasted for five days, the oldest had attained the age of eighty-two, and the majority had existed for twenty, forty, and fifty days.

One of the twenty-six patients died, in consequence of enormous laceration of the soft parts surrounding the articulation produced by the teeth of an enraged horse.

One patient suffered ever afterwards from difficulty in the motions of the hands and fingers. Reduction had been effected in this instance eight days after the reception of the accident.

In one child, ten years of age, dislocation of the elbow had existed for sixty-six days, and reduction was found to be impossible.

The remainder of the twenty-six patients of the Baron were quickly and perfectly cured.

The twenty-seventh and twenty-eighth cases are taken from Dessault. One of the dislocations (of the head of the humerus) was reduced on the forty-fifth day. Emphysema supervened upon the chest, but the patient, who was sixty years of age, had recovered on the thirtieth day after the operation. The second dislocation (of the humerus also) was reduced by Dessault on the ninetieth day. The patient was a female, aged 34; she was cured on the sixty-eighth day from the operation.

The twenty-ninth and thirtieth cases are taken from a work of Mothe, a surgeon to the Hôtel Dieu of Lyons. One dislocation had existed for seventeen days, and the other for five weeks prior to reduction.

The thirty-first case occurred to M. Sanson, second surgeon of the Hôtel Dieu of Paris. The patient was a female aged fifty-five, and the dislocation was reduced on the ninety-eighth day. The patient was soon well.

The thirty-second is extracted from a Treatise on Surgery by Delamotte, and is that of a physician named Desrosiers, who met with a dislocation of the humerus, which Delamotte reduced at the end of two months.

The thirty-third case is related in the fifth volume of the *Memoirs of the Academy of Surgery*, and displays so much of the incredible and inaccurate, as not to deserve more particular notice. The thigh is said to have been dislocated, and to have been reduced after the expiration of two years.

* A little research would extend this list from English sources. We are afraid of unseasonably augmenting the dimensions of this article.—Eds.

M. Dupuytren relates a case, possessing some features of interest. The reporters, indeed, who magnify at every turn the genius of their chief, assert that the fact is unequalled for singularity by any in the history of medicine. Our readers may judge for themselves.

Case. An old woman presented herself in the out-patient's room at the Hôtel Dieu, with a dislocation of the head of the humerus. The accident had happened six weeks previously, from a fall upon the hand with the arm extended forwards. The symptoms on her application were evidently those of dislocation downwards, into the axilla. But she stated that the symptoms had varied in the interval between her fall and her appearance at the Hôtel Dieu; and she said she had had the power of restoring the limb to its proper place, by efforts of her own and certain motions of the shoulder. When she had done this, she could move the limb, but still a certain degree of difficulty was experienced, and on making the attempt at any thing like an extensive motion, the symptoms of dislocation reappeared.

M. Dupuytren at first disregarded this story, and proceeded in the usual manner to reduce the limb. This appeared to have been done, and the patient declared that the limb was in place, as it had been before. On making a more particular examination of the shoulder, M. Dupuytren discovered that the deltoid was still more flattened than natural, and the prominence of the acromion still too great. Extension and counter-extension were resumed, and, after some slight efforts the head of the humerus was properly lodged in the glenoid cavity.

M. Dupuytren explains the circumstance with ingenious probability. The head of the humerus had undoubtedly been dislocated into the axilla, and had probably ruptured the capsular ligament. He supposes that the patient was enabled to replace it, partly on the anterior border of the glenoid fossa, partly in the contiguous subscapular fossa—that slight motions of the arm were compatible with the presence of the head of the bone in this situation—but, that more extensive movements occasioned its displacement.

These are the only observations of the Baron on dislocation of the head of the humerus, which appear to require any notice.

ON CONGENITAL DISLOCATION OF THE FEMUR.

This is the subject of a clinical lecture of forty-eight pages in length. It does not follow the preceding article, in the publishing volume, but we introduce it here, for the purpose of connecting the remarks on dislocations. The substance of this lecture may be found in a memoir of M. Dupuytren's in the *Repertoire d'Anatomie*. That memoir was noticed in the year 1827; but as the abstract we then gave was brief, though sufficient to display the author's views, and as many of our present readers are probably unacquainted with it, we think we may be excused for its reintroduction upon this occasion. It would not be just to our readers nor to the lecturer to omit all notice of this, an interesting and important lecture, and we cannot present a more complete and at the same time condensed exposition of the lecturer's views, than the following short republication will afford.

It is well known that the most frequent kind of dislocation to which the hip-joint is liable is that of the head of the femur upwards and backwards on the dorsum of the ileum. It is also well known that of this dislocation there are two varieties—the first is the result of accident—the second is *consecutive*, the result of scrofulous ulceration in the joint. But M. Dupuytren in the memoir now before us, proposes to add to the list a third variety of this same dislocation, which, as it is found at birth, he terms “congenital.”

The signs which characterise it, are shortening of the limb—presence of the head of the femur on the dorsum ilei—prominence of the trochanter major—retraction of almost all the muscles of the upper part of the thigh towards the crest of the ileum, where they form around the head of the femur a kind of cone, the base towards the os innominatum, the apex towards the trochanter—the almost entire denudation in consequence, of the tuber ischii—the rotation of the limb inwards—the obliquity of the thigh proportioned, of course, to the age and development of the pelvis—the meagreness of the limb, out of all proportion to the trunk and upper extremities, which are really well developed—and the imperfect motions, particularly of abduction and rotation. The upper part of the trunk of persons thus affected is thrown backwards, whilst the lumbar portion of the column projects as much forwards; the pelvis is placed almost horizontally on the femurs, and the ball of the feet alone touches the ground. In walking we observe them incline the body strongly towards the limb which is to support the weight, at which moment the head of the femur of that side is seen distinctly to rise on the dorsum ilei, in consequence of the superincumbent weight and sinking of the pelvis, and then they drag painfully forwards the opposite limb, the head of the femur of which is perceived not to rise but to sink, in consequence of its own weight drawing it down. This series of phenomena then is repeated each step the patient takes, and although locomotion to him is not so painful as it appears, still he is incapable of making any thing like a long journey.

In the recumbent posture, most of the symptoms of the dislocation in a great measure disappear, in consequence, no doubt, of the relaxation of the muscles and removal of the weight of the trunk. In this position of the body the surgeon can by a slight effort elongate the limb and shorten it again, that is, he can pull the head of the femur downwards or press it again upwards to the extent of two or even three inches, according to circumstances.

Let us look to the history of this complaint. Even at birth the prominence of the haunches, the obliquity of the femurs, &c. are perceptible, but in these cases the attention of the parents is seldom much directed to the malformation till the child begins to walk, and indeed even then its awkward efforts are attributed in general to weakness, &c. till the end of the third or fourth year, when the parent is at last convinced there must be something wrong. As the pelvis begins to be developed, (for it is a curious fact that the growth of the pelvis is never affected in these patients,) the symptoms which we have enumerated above become more marked, especially in females, and a person not acquainted with the true nature of the malady would consider it the consequence of scrofulous disease of the joint. But the previous history, the absence of all pain, swelling, abscess, fistula or

enicatrix, and the simultaneous affection of both sides are sufficient to correct this error. At the same time it must be remarked that these individuals are for the most part of a lymphatic and scrophulous habit.

As the age of the person increases, and the superincumbent weight becomes of course greater, the heads of the femurs rise on the dorsum ilei till at last they almost touch the crista, the obliquity of the bones is increased, and the difficulty of motion proceeds at last so far as to incapacitate the patient from all active exercise.

As this of course is not a fatal disease, the opportunities for cultivating its pathology must be comparatively rare. In the cases which he has examined M. Dupuytren has found the acetabulum almost entirely obliterated or even entirely wanting; the head of the femur a little flattened on its internal and interior surface, and a sort of cotyloid cavity to lodge it, formed on the dorsum of the ileum, as happens in unreduced accidental dislocations. In one or two instances, he has seen the ligamentum teres elongated, and in some places worn apparently from the pressure and friction of the head of the femur.

The Baron puts some questions to himself and the reader as to the etiology. He asks, can the dislocation be consecutive to a disease which assailed the fœtus and disappeared before birth? Or can it be the result of an ante-natal accident? Or lastly, can it be owing to an original imperfection of the acetabulum, in other words, can it be a congenital malformation? He seems to incline to this position, but like a skilful disputant he he has dealt his blows so equally to all his men of straw, that it is almost hard to say which is up or which is down.

M. Dupuytren makes some very sensible remarks on the treatment, which of course can be but palliative. As the weight of the trunk is the main agent in aggravating the displacement, repose is obviously indicated; but it is not necessary to confine patients to the recumbent posture; for in the act of sitting there is no stress on the femurs, the body resting entirely on the tuberosities of the ischia. Let these individuals then choose a profession which they can exercise when seated. Our author advises, likewise, the use of the cold bath, and the application of a bandage which encircles the pelvis, confines the trochanters, and keeps them of an uniform height, thus binding the ill-adapted parts together, and preventing that continual motion to which they are exposed. This practice, though it certainly will not cure the complaint, will give a great degree of support to the hip-joints, and prevent the progress of the displacement.

In the course of eighteen years, M. Dupuytren has met with twenty cases of this kind, seventeen or eighteen of which have been females.

ON THE CLUB-FOOT.

This is a very frequent malformation. The Baron's observations upon it are brief, and are chiefly intended to urge practitioners to endeavour to remedy it early in life. There is no complaint, according to the Baron, in which a "stitch in time" is more necessary or more useful.

There appears to be three varieties of distorted, or club-foot. The most

frequent is that to which the name of *varus* was anciently given. The point of the foot is directed inwards, and the sole is upturned in a similar direction, the patient walking on the outside of the foot, or sometimes even on a portion of its dorsum. The second variety, formerly called *valgus*, is much less frequent than the former; in it, the foot is turned downwards. In the third form, the toes are turned absolutely backwards, and the whole of the foot is so reversed, that the patient walks completely on its dorsum.

The essential cause of all these malformations is luxation of one of the bones of the tarsus, the ligaments and muscles being only consecutively altered. The causes which favour or occasion these anomalies, during uterine existence, have attracted much attention; but received no elucidation. In fact, we know nothing whatever about them. The external symptoms and the anatomical condition of the interior, have fully occupied anatomists and surgeons; but, none, observes the Baron, have accurately pointed out the changes that ensue in the affected limb.

The malformation may be limited to one foot, or occupy both. When the latter is the case, both limbs are usually equally developed, and nothing further need be said about them. When one foot is affected, the consequences are as follow.

In proportion as the individual grows older, the limb of the deformed side wastes. The cause is apparent; the patient instinctively employs the sound foot more than the diseased one, and the muscles and other tissues waste, or rather they do not sufficiently increase, because they are not proportionately used. Wasting of the muscles may, indeed, be remediable, but another and more serious effect is observed. The bones do not attain the same length on the affected, as on the unaffected side. As life advances, the difference is more marked. At birth, it is not present—at the age of ten years it has been very evident—at twenty, it is such as to set at defiance all remediable efforts. If the bones are shortened, the muscles and tendons must be shortened also. The tendo Achillis, at manhood, is so contracted as to render a high-heeled shoe indispensable, were the foot restored to its natural direction.

It is on these accounts, that the Baron impresses on surgeons and on parents, the paramount necessity of early attention to this ungainly malformation. Treatment in time is the only treatment. In infancy, the tissues are yielding and soft, and the foot can be placed in its natural relations without difficulty and without pain. As infancy recedes, the difficulties rise, and after a season become insurmountable.

And this, as we said before, is the sum of the lecture.

ON LACERATION IN THE CENTRE OF THE PERINEUM DURING LABOUR.

M. Dupuytren commences by observing, that rupture of the posterior commissure of the vulva, extending more or less into the perineum, is a very frequent accident in labour. Sometimes the laceration is greater, involving the lower half of the posterior wall of the vagina, the whole extent of the perineum, the sphincter of the anus, and the anterior wall of the rectum, to a certain height. But this is not the lesion that forms the subject of the

present lecture; it is laceration of the central portion of the perinæum, without injury of the sphincter ani, or of the commissure of the vulva: through this laceration the fetus is propelled.

It might, *a priori*, appear impossible for a body, of the bulk of a fetus and its appurtenances, to pass through an opening confined to a space so limited as the perinæum of the female. What reason might reject, experience has confirmed. M. Dupuytren, or his reporters, adduce a long and an imposing list of names, as evidence in favour of the fact. Nédey, a surgeon of Besançon—Coutouly—Dr. Denman—Dr. Joubert—Meckel—Dr. J. Douglas—Moschener—Frank—Moreau, and others, are severally quoted, and their cases cited. For these details, interesting as they are in connexion with each other, we refer the curious reader to the lecture itself, and proceed to relate the particulars of a case which occurred in the wards of the Hôtel Dieu.

Case. Mad. B. æt. 38, was seized with the labour-pains of her first confinement in the morning of Sept. 3d, 1832. The child presented with the head in the first position, and labour went on well till the occiput appeared at the vulva, which was very narrow. Four hours after the commencement of the pains, two severe ones occurred, and the midwife felt a laceration of the perinæum take place under her hand, which was occupied in supporting it; at that instant, the head and the body of the fetus issued at the aperture. The parts, it should be mentioned, were exposed in such a manner, that the midwife could distinctly see all that occurred. The child was born, and the cord and placenta were afterwards removed through the laceration. No hæmorrhage ensued.

Nothing was done until the tenth day after the confinement, when M. Guersent, jun. was consulted. He employed, in succession, lotions of the chloride of soda, the potassa fusa, the suture. For five days, the wound was united by the latter, excepting only a small fistulous point near the rectum. The suture was removed, and, in two days, the union was totally destroyed by some exertion of the patient.

On the 6th of October, the patient entered the Hôtel Dieu. The opening of the vulva was found to be situated remarkably forwards, a circumstance deserving of attention. Behind the vulva, and a little to the left, was another opening, irregularly rounded, and capable of admitting the extremities of the three fingers. The commissure of the vulva between them was perfect. Behind the lacerated opening was the anus, the sphincter of which was perfect also.

Such was the fact, and, after a few oratorical exclamations, M. Dupuytren goes to work in good earnest to explain, to comment, and to speculate. Persons in midwifery-practice, says he, will often have occasion to remark, that the vagina is placed very high and near the pubes, while the perinæum is proportionably lengthened. The vulva in these cases is contracted, although the vagina may present its natural dimensions. The diminution in size of the vulva results from the elongation of the perinæum, which latter may close a fourth, a third, or even so much as a half of the former. In females presenting this malformation, the finger, in exploring the vagina,

must be carried downwards and backwards, instead of almost horizontally, and any instrument must be introduced in the same direction.

This state of the parts gives rise to several inconveniences. Sometimes it creates great difficulty in connexion—or the menses may be partially retained—or leucorrhœal matter may collect—or, in short, many other annoyances may ensue. The obstacles which it opposes to the process of parturition may be easily conceived. The head of the child, arrested by the narrow opening of the vulva, is directed against the perinæum. If the posterior commissure of the vulva is weak, it gives way—if resistant, the centre of the perinæum yields.

The malformation may either be congenital or accidental, that is, the consequence of cicatrization after burns, or wounds, or lacerations in previous confinements. M. Dupuytren digresses in a slight degree on the treatment of this encroaching perinæum. It must necessarily be divided, and appropriate means must be subsequently adopted to prevent improper cicatrization. In a pregnant female it is better to do this sufficiently early to allow of the formation of a firm cicatrix, prior to the supervention of labour. But circumstances may even render it advisable to divide the perinæum during that process. Dr. Champenois relates a case in which he performed the operation at this period, and prevented further laceration of the perinæum. The cause had been a burn in early life. Dr. Buët has related a curious, and rather a smutty case of accidental contraction of the vulva. A young lady managed to commit a faux pas, which ended in pregnancy—she concealed this, and supported alone a secret and most painful labour, terminating in extensive laceration of the labia and the perinæum. Union of the wound ensued, and occasioned such contraction that the little finger could scarcely be inserted in the vulva that was left. The young lady married, but the husband was unable to consummate the ceremony, on account of the obstinate virginity of his wife. Overjoyed at this proof of maiden chastity, he hastened to a surgeon to pick the lock. The man of art, intrusted by the lady with the sacred secret, divided the cicatrix, and prevented the re-establishment of the contraction by the introduction of lint.

M. Dupuytren observes that the position of the patient exercises an important influence on the presentation of the child. In the case related by Nédéy, the woman was seated on the pot-de-chambre, when the birth and rupture of the perinæum occurred. In the instance related by M. Dupuytren himself, the mother was so propped up with pillows, as almost to assume the sitting posture. M. Dupuytren thinks, with M. Moreau, that too great a curvature backwards of the lower extremity of the sacrum and coccyx, or, what is tantamount to this, too decided a projection of the sacro-vertebral angle, must be ranked among the causes of the accident. Other causes may exist in the anatomical relations of the parts, but they have not been sufficiently nor accurately noted, and conjectures would be unsatisfactory and idle.

The last, and not the least important consideration is the treatment to be followed in these cases. The suture failed in the case received at the Hôtel Dieu, but M. Dupuytren feels well assured that it failed because it was withdrawn too soon. In all attempts to unite wounds of this description by

the suture, the latter should be retained for a considerable length of time. A case is related in illustration of this maxim.

Case. Some years ago, M. Dupuytren was consulted by M. Gardien and another physician respecting the case of a young woman, who had been clandestinely confined. A complete rupture of the perinæum had occurred, and involved the lower inch of the anterior wall of the rectum. Several days had elapsed since the occurrence of the laceration. M. Dupuytren united the edges of the wound by the interrupted suture. In the course of a month, the girl was obliged to return to her parents, union not having yet taken place, and suppuration being still abundant. The threads of the suture had not cut through the skin, and M. Dupuytren recommended that they should not be removed until perfect union was obtained. Three or four years after this, a man and woman entered the private room of the Baron, to consult him on a circumstance embarrassing to both parties. The parties had been married, but the husband was unable to consummate the ceremony, in consequence of some difficulty at the entrance of the vagina. M. Dupuytren made an examination of the female, and found she was no other than his quondam patient. Union and subsequent contraction of the ruptured perinæum had occurred, and a firm cicatrix encroaching on the vagina had occasioned the ill-success of the husband. M. Dupuytren prescribed patience and perseverance, and these qualities were attended with their usual success. The female became pregnant, and was delivered without accident.

To return to the case received by M. Dupuytren in the Hôtel Dieu. We left the lady with a central opening in the perinæum, for which the suture had been unsuccessfully employed. M. Dupuytren directed her to recline continually upon her back, and the thighs were secured together by a bandage. The effect of this simple treatment was surprising. The opening contracted and finally closed, and on the 30th of November the patient left the hospital completely cured. The wound was closed, but probably some points yet remained ununited in the part of the vagina adjoining to the perinæum. The patient was enjoined to rest as much as possible, and to avoid connexion, in order that the cicatrization might be firm.

It will be observed by the reader of this lecture, that the Baron offers no novelty in treatment, and scarcely any in description. Yet the subject is deserving of the space we have devoted to it, and the case of laceration in the centre of the perinæum, is at least an addition to those already upon record.

FISSURES OF THE ANUS.

We noticed this lecture in a late number of this Journal. We shall merely observe that the affection is not uncommon, particularly in the tenants of venereal hospitals. We have seen it in numerous instances at the Lock, and there seems some reason to believe that it frequently arises, like anal condylomata, from unnatural connexion.

Fissure of the anus consists in a long superficial ulceration, developed near the margin of the anus, in the radiated folds of the mucus membrane.

On separating the sides of the anus, and making the patient force down, a narrow chink is perceived; its surface red, its edges tumid and callous. The introduction of the finger is often necessary, to ascertain the extent to which it passes. It is situated more frequently on the lateral or posterior, than on the anterior face of the anus, and seldom attacks its whole circumference.

The severity of the affection depends on the spasmodic contraction of the sphincter, which occurs on the contact of the smallest foreign body.*

Division of the sphincter, and the application of the nitrate of silver, are the only remedies productive of advantage. M. Dupuytren, however, assures us, that spasm of the sphincter is the essence of the malady, and ulceration only a secondary phenomenon. He, therefore, aims at removing the former, in the expectation that the latter may then be speedily cured. With this view, he employs the following ointment.

R. Axungiæ, p. s. vj.
Extracti belladonnæ,
Plumb. acet. aa p. m. j. M.

A tent of moderate size is smeared with this, and passed into the rectum, the size of the former being gradually increased. The constant employment of the ointment for some days frequently occasions complete relief.

For cases and details we refer to the Number of this Journal already mentioned. We cannot forbear from remarking, that the ulcer is more likely to constitute the cause of the spasm, than the spasm to occasion, or even essentially to maintain the ulcer. We have lately tried the Baron's method in these cases. We regret to state that it did not succeed. We found that a single touch of the nitrate of silver did more to allay the spasmodic contraction of the sphincter than any description of sedative or narcotic.

SOME REMARKS ON THE EMPLOYMENT OF CAUTERIES AND MOXAS.

These are erected into a separate clinical article. They may be readily compressed into a very narrow compass. We need scarcely observe, with the accuracy of the Baron, that they occasion pain and produce an eschar, consequences equally obvious and familiar. We shall glance at the situations in which issues are most convenient, and extract a practical remark of the lecturer on the best mode of keeping them open.

The best part in the arm for the establishment of an issue is the slight depression situated at the point of insertion of the deltoid. In the thigh, the most eligible spot is a few finger's breadth above the internal condyle of the femur, over the cellular partition between the quadriceps extensor and the adductors. In the leg, we may select the interval between the internal border of the tibia and the gastrocnemius.

M. Dupuytren recommends, with questionable judgment, that the issue

should be slowly made. The suffering of the patient prompts, and almost compels, the humane operator, to accelerate the work of suffering.

There are two modes of keeping issues open. One is to apply and to retain some foreign substance, as a bean, or a piece of lint; the other consists in the frequent application of the caustic. Mr. Brodie has directed the attention of surgeons to the superiority of the latter method. M. Dupuytren animadverts, like Mr. Brodie, on the disadvantages attendant on the former—on its want of efficacy upon one hand, and the irritation of the system which it sometimes excites upon the other. It is more particularly for the reason last mentioned, that M. Dupuytren condemns this method. But his plan is not identical with that of Mr. Brodie. The latter gentleman keeps the issue *open* by occasional applications of the caustic; the former recommends a succession of issues, allowing one to close before he repeats the cauterizing process. Mr. Brodie's method has these advantages; it is productive of less pain, because the caustic is more lightly used; and probably its efficacy is greater, because the tissue is kept constantly discharging to a certain point.

ABSCESS IN THE RIGHT ILIAC FOSSA.

This, like other articles in the volumes before us, has been noticed in former Numbers of this Journal. Abscess, occurring in the right iliac fossa, has been noticed upon more than one occasion.* We will not omit all notice of the affection, but content ourselves with offering a sketch of the more important facts connected with its history and treatment.

The more frequent occurrence of inflammatory swellings in the right iliac fossa than in the left, would appear to be explained in a sufficient degree by their respective anatomical relations. The cæcum unites with the small intestines in a manner so abrupt, that a remarkable contraction, the ileo-cæcal valve is presented. The food become fæces, has here to ascend against the laws of gravity, and probably is owing to the combination of these circumstances:—The valve, the cæcal cul-de-sac, and the ascending course which the excrement must take, that lodgements of foreign bodies, such as fish-bones, fruit-stones, and so forth, is frequently observed in this part of the alimentary canal. The cæcum is invested only in front by the peritoneum; behind, it is implanted in a mass of loose cellular tissue, which forms its cushion in the iliac fossa, and connects it with the iliac muscle. Such are the anatomical conditions displayed by the cæcum and commencing portion of the ascending colon. On the left side, the arrangement of the colon is different. Its sigmoid flexure is almost surrounded by peritoneum—no contraction of calibre is remarked—the passage of the excrement is promoted by its descent.

It would seem that precursory symptoms are usually experienced prior to the formation, or, at least, to the appearance of the abscess. The patient

* *Vide* No 19, for January, 1829—p. 217-221.—Eds.

may have committed some imprudences in regimen, and may have suffered from some irregularity of bowels. Constipation, or diarrhœa, or colic pains in the right iliac fossa, may have been remarked for some days or some months, and vomiting may have occurred in connexion with those symptoms. The premonitory symptoms, in short, are vague, and such symptoms occur upon many occasions without any abscess supervening.

Predisposing causes are various and vague. Youth would appear more prone to the disease than advanced or even than mature life; for of sixteen cases carefully collected, eleven were in individuals under thirty years of age. Males are more subject to the malady than females. Autumn and the end of Summer are the seasons in which it is most ripe. The two latter circumstances probably are due to the greater excesses and more violent exertion of men than women. Such is not an unlikely explanation, though it does not occur to M. Dupuytren. That this explanation is consistent with the facts will appear when we state that persons in laborious and unhealthy occupations are those most frequently the subjects of the disease. House-painters, colour-grinders, copper-turners, are the artisans enumerated as especial sufferers by the lecturer. Those occupied with sedentary or with literary pursuits have been affected, after labouring under great derangement of the organs of digestion. Peasants or workmen leaving the country to reside in Paris have, in many instances, laboured under this complaint, a circumstance attributed by M. Dupuytren to the miserable fare of the Parisian *ouvrier*, especially in the fine season when employment is scarce.

The symptoms of the disease, when actually established, are not very equivocal. A fixed pain is felt in the iliac region, and circumscribed swelling is probably apparent. On tapping or on pressing the affected part, it is found more tense and resistant than natural, and a tumor may be distinguished, of various volume, of considerable hardness, and displaying more tenderness than any other part of the abdomen, and appearing as if it reposed upon the cæcum. The patient complains of constipation, of colic, and of inability to expel the intestinal flatus by the rectum. Sometimes there is fever; usually the general symptoms are slight.

If the case proceeds, as it usually does, to a favourable termination, the tumor slowly disappears; deep hardness remaining for a lengthened period to indicate the seat of the disease. Of sixteen cases collected and compared by M. Meinière, eleven terminated in this successful manner.

Less fortunate cases do, however, occur. Pulsating pain is experienced in the tumor, which increases in dimensions, becomes softer, fluctuates, and bursts. Happily the abscess opens in many instances into the intestine; when a pressing desire is felt to go to stool, and purulent evacuations from the bowels ensue, accompanied with a diminution of the volume of the tumor. Recovery in such cases is generally rapid. Sometimes the abscess bursts in the bladder as well as the intestine—sometimes it is discharged into the vagina—sometimes it opens on the surface of the body. This latter termination is almost always fatal, and chiefly, perhaps, upon this account:—that the bottom of the abscess is the most dependent part in the usual position on the back, and the matter is consequently prevented from obtaining a free and ready exit. The results are of course the formation and extension of

fresh purulent collections, the introduction of air, and confinement of putrid and noxious discharge.

A curious circumstance is noticed. Purulent matter passes from the abscess into the intestine, and faeces escape from the latter to the abscess. The constant pressure of the abdominal parietes is probably the most efficient agent in producing this exchange of contents.

Sometimes inflammation extends to the peritoneum, or cellular tissue seated behind it. This is a danger to be borne in mind, and calculated to inspire uneasiness and caution in cases which wear the most favourable aspect.

The Baron makes some remarks on the affections with which the present might perhaps be confounded. 1. Inflammatory swellings are sometimes developed in the right or the left iliac fossa, dependent upon inflammation of the iliac fascia. 2. It is not unfrequent after confinement to observe a swelling in the iliac fossa, originating in the round or the broad ligaments of the uterus, and extending to the neighbouring cellular tissue and the iliac fossa. Sometimes such abscesses are discharged into the womb; sometimes they burst into the vagina. 3. The iliac fossæ may become the seat of collections of matter, arising from caries of the neighbouring bones or disease of the contiguous ligaments. This species of collection is soft and fluctuates as soon as it appears, a sufficiently distinctive feature. M. Dupuytren observes, in concluding his notice of these abscesses resembling the one we are considering, that he frequently has witnessed very gross mistakes in the diagnosis of the latter.

The prognosis is not in general unfavourable. Of sixteen patients affected with abscess in the right iliac fossa, one, and one only died. The supervention of peritonitis is usually fatal. The treatment is simple, obvious, and efficient. Local and general bleeding, fomentations, poultices, baths, lavements, and laxative drinks, are the artillery of M. Dupuytren. The name of calomel, that bug-bear of French physic, is not breathed, and the surgeon of the Hôtel Dieu does not hesitate to use the lancet, but dreads to prescribe the pill. In this country calomel with mild aperients would form an important item in the remedies.

For cases illustrative of the description and remarks we must refer to other papers of this Journal.*

Here we must bring this article to a conclusion. In our next we shall resume the review of the third, and enter upon that of the fourth volume of these lectures, and we trust we shall present in a concise, yet sufficiently ample, form, the substance of what is really a valuable work.

* Several are contained in the Number previously alluded to—that for January, 1829.—Eds.

PATHOLOGICAL AND SURGICAL OBSERVATIONS ON THE DISEASES OF THE JOINTS. By *B. C. Brodie, V.P.R.S. &c. &c. &c.* Third Edition, with Alterations and Additions. Octavo, pp. 344. London, 1834.

[Second and concluding article.]

IN the last number of this Journal we brought down our analysis of Mr. Brodie's admirable work to the subject of caries of the spine, on which we did not actually enter. It remains for us to place before our readers a digest of the remaining portion of the volume, consisting of about one hundred pages. Mr. Brodie treats consecutively of caries of the spine—tumors and loose cartilages in the cavities of the joints—malignant diseases of the joints—some other diseases of the joints—and, of inflammation of the *bursæ mucosæ*.

ON CARIES OF THE SPINE.

It is scarcely necessary to observe that Mr. Brodie commences his account of a disease, with an enumeration of the pathological changes of which it is made up. He remarks, with reference to the present subject, that opportunities of examining the morbid appearances in a very early stage of disease in the spine are of very rare occurrence. It is evident, however, when the structure of the joints between the bodies of the *vertebræ* is considered, that they cannot be liable to any diseases, that bear a resemblance to the affections of the synovial membrane which occur in other articulations. But analogy might lead us to expect, what Mr. Brodie's observations have proved to be really the fact, that as two important elements of all joints—cartilage and bone—are present in the spinal column, disease might commence in the one or in the other.

Mr. Brodie has found, in some instances, the intervertebral cartilages in a state of ulceration, while the bones were either in a perfectly healthy state, or merely affected with chronic inflammation, without having lost their natural texture and hardness; but in others it has been manifest that the original disease has been that peculiar scrofulous condition of the bones, the effects of which in the bones and joints of the extremities have been described at length in the chapter with which our notice was concluded in the last number.

Mr. Brodie relates six cases, displaying the morbid alterations, of which the sum gives the history of the disease. He then presents a summary recapitulation of the facts, to which we shall direct our attention first.

In some cases caries of the spine has its origin in that peculiar alteration of the bone, described by Mr. Brodie under the term of scrofulous disease of the joint. Ulceration, in these circumstances, may begin on any part of the surface, or even in the centre of the bone, but in general the first effects of it are perceptible where the intervertebral cartilage is connected with it, and in the intervertebral cartilage itself.

In other cases the *vertebræ* retain their natural texture and hardness, and the first indication of the disease is ulceration of one or more of the intervertebral cartilages, and of the surfaces of bone with which they are connected.

There is still another order of cases, but these are of more rare occurrence, in which the bodies of the vertebræ are affected with chronic inflammation, of which ulceration of the intervertebral cartilages is the consequence.

In whichever of these ways the disease begins, if not checked in its progress, it proceeds to the destruction of the bodies of the vertebræ and intervertebral cartilages, leaving the posterior parts of the vertebræ unaffected by it; the necessary consequence of which is, an incurvation of the spine forward, and a projection of the spinous processes posteriorly.

At this period of the disease the membranes of the spinal chord sometimes become affected with a chronic inflammation, which may extend even to the spinal chord itself; and where there is much incurvation, the latter not only becomes incurvated with it, but actually compressed in such a manner as cannot fail to interfere with the due performance of its functions.

Suppuration sometimes takes place at a very early period; at other times, not until the disease has made considerable progress. The soft parts in the neighbourhood of the abscess become thickened and consolidated, forming a thick capsule, in which the abscess is sometimes retained for several successive years, but from which it ultimately makes its way to the surface, presenting itself in one or another situation, according to circumstances.

In the advanced stage of the disease, new bone is often deposited in irregular masses on the surface of the bodies of the neighbouring vertebræ, and where recovery takes place, the carious surface of the vertebra above coming in contact with that of the vertebra below, they became united with each other, at first, by soft substance, afterwards by bony ankylosis. The disposition to ankylosis is not the same under all circumstances; it is much less where the bones are affected by scrofula than where they retain their natural texture and hardness; and this explains wherefore, in the former class of cases, a cure is effected with more difficulty than in the latter.

Occasionally, portions of the ulcerated or carious bone lose their vitality, and, having become detached, are found lying loose in the cavity of the abscess. It is scarcely necessary to add, that the existence of such exfoliations is of itself almost sufficient to preclude all chance of the patient's recovery." 245.

Mr. Brodie remarks in continuation, that caries of the spine may originate in what may be considered as causes from without. It may be produced, for instance, by the pressure of an abscess of the neighbouring soft parts—of an aneurism of the aorta—of any kind of tumor. In such cases, the intervertebral cartilages are in general found to be little, if at all affected, and they project, perhaps of their natural size, while the bones themselves are in a great degree consumed. Where the spine is thus rendered carious consecutively, the symptoms are usually obscure, and the spinal disease is for the most part unsuspected.

Not unfrequently, caries of the spine itself is complicated with caries from external pressure. For example, disease of the vertebræ, or intervertebral cartilages, occasions caries, and this is followed by the formation of abscess. The matter having become accumulated in considerable quantity, the abscess occupies a large space; and by its pressure on the surfaces of the vertebræ in the neighbourhood, causes an extensive caries of them far beyond the boundaries of the original disease.

We shall now select from the cases which Mr. Brodie relates, such particulars as support the preceding observations.

Case 1. (LXII.) A girl, eight years of age, died in the year 1808, in the infirmary of the parish of St. George, Hanover Square. She had been an in-patient on account of disease of the spine, the spinous processes of the

dorsal vertebræ forming a preternatural projection posteriorly. Abscesses had also burst in the groin.

On examination of the body, there was found at the posterior part of the abdomen a confused mass of soft substance, which proved to be the parietes of an abscess communicating with the orifices in the groin. The bodies of the lowest dorsal and three superior lumbar vertebræ were found at the posterior part of the abscess, nearly consumed by caries. There were no remains of the intervertebral cartilages between the tenth and eleventh dorsal, nor of those between the third and fourth lumbar vertebræ. These intervertebral spaces were filled with pus, and the opposite surfaces of the vertebræ were carious, but only to a small extent. The central part of the intervertebral cartilage between the ninth and tenth dorsal vertebræ had been completely absorbed, and pus was found in its place. Externally to this, the concentric layers of elastic cartilage were entire, though somewhat altered from their natural appearance.

In the next case, (Case LXIII.) besides extensive caries of the dorsal vertebræ and ulceration of the inter-vertebral cartilages, the latter intervening between the third and fourth, fifth and sixth, seventh and eighth, tenth and eleventh dorsal vertebræ, and also that between the eleventh dorsal and first lumbar vertebræ were found in a perfectly natural state towards their circumference, but of a dark colour in the centre. On the surfaces towards the bones they, as well as the bones themselves, were in a state of incipient ulceration, but without any appearance of pus having been secreted. The bones of the vertebræ had everywhere their natural texture and hardness.

Case 3. (XLV.) A girl, aged 19, was admitted into St. George's Hospital, on the 30th May, 1821, with violent pain in the left leg, from the knee to the foot. Previously to her admission she had suffered from pain in the loins, which was relieved by cupping. Soon after her admission this symptom returned, accompanied with a tumor in the loins on the right side. Sixteen ounces of matter were discharged from this by puncture, hectic symptoms were established, and on the 3d of August she died.

On dissection, the bodies of the three or four inferior lumbar vertebræ were found preternaturally vascular, and of a dark, and almost black colour; but they retained their natural texture and hardness, and had undergone none of those changes which mark the existence of the scrofulous affection of the bones. The intervertebral cartilages were in a natural state; but the body of one of the vertebræ was superficially ulcerated for about the extent of a sixpence on one side, towards the posterior part. A large abscess communicated with this ulceration, and occupied the situation of the psoas muscle of the left side, extending downwards to the groin.

Case 4. (LXVI.) A man, aged 45, was admitted into the hospital with an abscess in the left groin. On being confined to the horizontal posture this disappeared, and then presented itself over the left os innominatum. Forty ounces of pus were discharged from this by puncture. The patient died exhausted by hectic.

On dissection, it was found that the cancellous structure of all the dorsal and lumbar vertebræ was of a dark red colour, and softer than natural, so

that they might be cut with a common scalpel, or even crushed by the pressure of the thumb and fingers.

The opposite surfaces of the bodies of the second and third lumbar vertebræ, and of the cartilage between them, at the posterior part, were extensively destroyed by ulceration. Anteriorly, the bones and the intervertebral cartilage were entire, and the latter was in a perfectly natural state; but the bones throughout were of a dark and almost black colour.

On one side of the body of the twelfth dorsal vertebra, there was a small ulcerated spot, forming an opening which extended itself into a small cavity in the centre of the bone. This bone was also of a black colour; but the intervertebral cartilage belonging to it, as well as the intervertebral cartilages connected with the other vertebræ, were in a perfectly natural state.

These cases appear to be sufficient to display the principal pathological features of caries of the spine. On the one hand, they seem to shew that the intervertebral cartilage may constitute the primary seat of the disease; on the other, it is observed to be limited to the bone. It may be noticed that, in one case, the vertebræ were softened, as in scrofulous disease of the bones of the extremities. In two other cases related by Mr. Brodie, caries of the spine was co-existent with tubercles in the lungs, and with other marks of the strumous constitution. In one of these instances, the vertebræ retained their natural hardness, but appeared to be less vascular than natural; in the other, the bodies of the vertebræ were softened, and the cancellated structure of the ribs was filled with a curdly matter.

We may now proceed to the consideration of the symptoms of caries of the spine.

Mr. Brodie regrets that he is unable to offer diagnostic marks of a satisfactory description, between ulceration of the intervertebral cartilage and caries of the body of the vertebra. As caries of the latter is the common consequence of both, it might have been anticipated that a certain similarity would attend their symptoms. This anticipation appears to be borne out by facts. Mr. Brodie, however, hints his suspicion, that the following considerations may in some degree enable us to determine, or rather to suppose, the actual nature of the case.

"I suspect that, where the disease is of scrofulous origin, affecting the cancellous structure of the bones, it is more immediately followed by supuration, than where it commences in the form of ulceration of the intervertebral cartilages; and that in cases of the latter description the pain and tenderness in the situation of the carious portion of the spine is more considerable than in those of the former." 247.

It must consequently be understood that, when Mr. Brodie speaks of the symptoms of caries of the spine, his observations are intended to be applicable to the various cases of this description, excepting only those in which the alteration is a secondary result of the pressure of a tumor in the neighbourhood.

Caries of the spine is most frequent in those whose constitutions were originally weak, or whose bodily powers are in any way impaired. Sometimes the patient has previously enjoyed good health.

Mr. Brodie remarks that two orders of symptoms may be the results of this disease, independently of the effects which, in its most advanced stage,

it produces on the general system. The symptoms in question are, first, those which are the immediate consequence of the morbid condition of the vertebræ themselves, and of the intervertebral cartilages; and, secondly, those which arise from pressure on the spinal chord, or from irritation propagated to it, or to the nerves arising from it.

The symptoms of the first class are briefly enumerated by Mr. Brodie.

"1st. Pain and tenderness in the situation of the carious vertebræ.

2dly. Curvature of the spine forward, with an angular projection of the spinous processes posteriorly, the result of the bodies of the vertebræ having been destroyed, while the other parts of these bones remain entire.

3dly. Abscess commencing imperceptibly, but at last presenting itself as an external tumour." 249.

The second order of symptoms may be stated thus.

"4thly. Pains, loss of sensation, coldness, muscular spasms, and paralysis of the extremities.

5thly. Derangement of the functions of the various viscera, which are capable of being influenced by that portion of the spinal chord which is implicated in the disease." 249.

To the observations which succeed, we entreat the active attention of our readers. Indeed, the whole chapter on caries of the spine is a happy illustration of Mr. Brodie's method and style. The essence of a long experience and of patient observation is filtered through a close analytical process, and presented in the most concentrated form that the operations of a philosophical mind can effect. Were there many such chapters in many such works, the satire of D'Alembert on authors would be idle,* and the task of the critic would be vain. The latter could condense little, and condemn not at all, and, like Ramsay's shepherd, he must—

Break his pipe, and never whistle mair.

To return to the symptoms of caries of the spine. Mr. Brodie remarks that the whole of those enumerated above are not observed in every instance, nor do those which exist always shew themselves in the same order. They are modified and altered by various circumstances to a great extent, and few diseases display, in individual instances, such diversities of form, or require in the early stages more experience and discrimination, to enable the surgeon to form a correct diagnosis.

Mr. Brodie first considers the symptoms of caries, which are common to the affection in different portions of the spinal column. He afterwards particularises those which are peculiar to disease of its individual parts, or, at least, of the three great anatomical divisions.

"In the majority of cases, the first symptom which the patient notices is pain referred to that part of the spine in which the caries exists; at first trifling, but becoming more severe afterwards. The pain is aggravated by any sudden motion of the spine; by percussion, or by a jar communicated to it in any other way; as by stamping on the ground, striking the foot accidentally against a stone, sneezing, or coughing. In the advanced stage of the disease the pain is sometimes so severe, and so easily induced, that the patient cannot bear the slightest movement. Yet, in other cases, there is sometimes no pain in the spine whatever, from the first access of the disease to its termination." 250.

* L'auteur se tue à alonger, &c.

Mr. Brodie mentions two facts illustrative of the latter observation. In the case of a young gentleman, in whom the disease had been going on for years, and who displayed, on examination after death, a large abscess connected with caries of four or five of the dorsal vertebræ, no pain had ever been complained of. In another instance, the patient had not experienced any pain for the two or three years preceding his decease, and was supposed to have been cured; but, on dissection after death, Mr. Brodie found the bodies of the vertebræ still carious, and an abscess containing half a pint of matter in connexion with them.

As a general rule, pain precedes the appearance of curvature, for a period which varies from three months to two years, and is sometimes even longer than this. It is referred to the affected part. Where pain in the early stage is wanting, a circumstance which, on the whole, is rare, there is usually some derangement of the general health, weakness of the extremities, or other symptoms, shewing that the patient labours under some kind of disease, without indicating its exact nature and locality.

The distortion of the spine in these cases is peculiar. It forms an angle projecting backwards, an alteration which can only be effected by destruction of the bodies of one or more of the vertebræ. The curvature is in general gradually established. A young woman, however, who had made no previous complaint, experienced, after a slight exertion, a sensation as if something had given way in her back, and immediately afterwards lost the use of her lower limbs. This was followed by an angular projection of the spinous process of one of the inferior dorsal vertebræ, and a large abscess, which presented itself on one side of the abdomen; and the patient ultimately died. In another case, after the curvature had taken place, the form of it appeared to vary, in consequence of the diseased vertebræ admitting of being moved to a certain extent on each other; these motions being attended with increased pain, both in the spine and in the lower extremities. This patient ultimately recovered.

"Curvature of the spine in the direction forwards may arise from other causes, as a weak condition of the muscles, or a rickety affection of the bones. In general, in such cases, the curvature occupies the whole spine, which assumes the form of the segment of a circle. At other times, however, it occupies only a portion of the spine, usually that which is formed by the superior lumbar and inferior dorsal vertebræ; as I have ascertained, not only by examinations during life, but by dissection after death. Here the curvature is always gradual; never angular; and thus it may be distinguished from the curvature arising from caries. Nevertheless, I am satisfied that these different kinds of curvature, arising from different causes, have frequently been confounded with each other; and that some of the cases which have been published as examples of caries of the spine, and in which it may, at first, be a matter of surprise that so complete and so speedy a cure has been effected, have in reality been cases of an entirely different malady."* 253.

Mr. Brodie has already stated that suppuration appears to take place at an earlier period, in cases in which the disease originates in the bone, than in those in which it begins in the intervertebral cartilages. In cases of the

* Some excellent observations on this subject have been published by Mr. Earle, in the *Edinburgh Medical Journal* for January, 1815.

latter kind, the disease will sometimes proceed to a remarkable extent without the formation of abscess, a circumstance extremely fortunate for the patient, as his chances of recovery are greatly increased by it. But an abscess frequently exists, although no external signs of it are present. We frequently find evidence of this on dissection.

Caries of the vertebræ not uncommonly goes on for two or three years, before there are any certain indications of abscess. In one case, in which the disease was in the lumbar vertebræ, an abscess appeared in the groin at the end of eight years; and in a case of disease of the dorsal vertebræ, sixteen years formed the lengthened interval.

The formation of abscess is usually attended with some derangement of the general health—slight fever—loss of flesh—perhaps rigors. These symptoms may at first be relieved in some degree by the bursting of the abscess, but they afterwards recur in an aggravated form—the patient wastes under the influence of hectic—and some kind of fatal visceral disease is established.

Mr. Brodie next considers the peculiar symptoms produced by the affection of one or other part of the vertebral column.

When there is caries of the cervical vertebræ, the patient complains at first of pain in the neck, which is aggravated by every motion of the head, and which is not unfrequently mistaken for the muscular pains and stiffness connected with what is commonly called a stiff neck from cold. The pain gradually increases, and Mr. Brodie has found it more liable to be severe, than when the seat of the disease is in the lower part of the spine. When the spine has become incurvated forward, the angular projection posteriorly is observed to be trifling, except when the seventh cervical vertebra is implicated in the disease; a difference easily explained by the length of the spinous process of that vertebra.

Abscess connected with diseased cervical vertebræ usually presents itself among the muscles on the side of the neck. Occasionally it breaks into the pharynx. Mr. Brodie has seen one case in which it penetrated into the theca vertebralis, and the whole spinal chord was bathed in pus.

“At an early period of the disease, the patient frequently complains of pains in the arms and shoulders. After some time these pains subside, but they are followed by complete paralysis of the upper extremities; while the muscles which derive their nervous influence from the spinal chord below the neck remain subject to the will. In a still more advanced stage of the disease, the paralysis extends to the muscles of the trunk and of the lower extremities. Then there are pains in the abdomen, which becomes distended and tympanitic; the bowels being at the same time obstinately constive. In all cases, there is pain in the occiput and temples; which is, however, most severe when the disease is situated in the two or three superior vertebræ. Not unfrequently the transverse ligament of the second vertebra is destroyed, and the consequence is, a dislocation of the odontoid process. Sometimes the dislocation is complete, and the patient, from the pressure made on the spinal chord, expires as suddenly as if the latter had been divided transversely. More frequently it happens that the displacement of the odontoid process is somewhat restrained by the pressure of the dura mater which lies over it. There is then some degree of pressure on the spinal chord, sufficient to excite irritation, but not sufficient to destroy its functions. Under these circumstances, the patient complains of increased pain in the head, followed by convulsions, stupor, dilated pupils, and other symptoms of effusion of fluid on the brain; and on examining the body, after death, we find

that such effusion has actually taken place, there being a collection of fluid in the ventricles, or in the base of the cranium, or in both of these situations." 266.

In cases of caries of the superior dorsal vertebræ, besides the usual pain and tenderness of the affected parts, the patient complains of pain and a sense of constriction in the chest; and when the disease is in the inferior dorsal vertebræ there is a similar sensation in the epigastrium, pain in the abdomen generally, and a disturbed state of the functions of the alimentary canal. Occasionally the urine is alkaline, or contains albumen, from which circumstance, in connexion with the existence of pain in or near the region of the kidney, it is sometimes difficult to determine, in the first instance, whether the patient labours under caries of the spine, or disease of the kidney.

When the spine is incurvated forwards, in consequence of the destruction of the bodies of the dorsal vertebræ, the angular projection behind is more distinct than where the lumbar or cervical vertebræ are affected. This is owing to the length and disposition of the dorsal spinous processes. When the curvature is considerable, the thorax is altered in figure, its diameter from above downwards being diminished, while its other diameters are increased. When the superior dorsal and inferior cervical vertebræ are both implicated in the disease, a large protuberance presents itself between the superior angles of the scapulæ, and the neck appears shortened, as if it had descended or sunk between the shoulders.

As the disease advances, the patient, in some instances, complains of pains, which are referred to one groin and hip. This circumstance not unfrequently occasions an error in diagnosis on the part of even practical surgeons. Afterwards pains, and a sense of constriction, are felt in the legs and thighs. Then the muscles are found to be not properly under the dominion of the will, so that the patient occasionally loses a step, or trips in walking. This is probably followed by a complete loss of voluntary power. In some cases there is an entire paralysis; the muscles of the lower extremities never acting under any circumstances; while in other cases, although they do not act under the influence of volition, they are subject to involuntary contractions or spasms. Occasionally, but rarely, the loss of voluntary power is attended with a total loss of sensibility. Paralysis of the bladder, and incontinence of the urine and fæces, sometimes accompany paralysis of the lower limbs.

"A considerable time generally elapses before abscess connected with caries of the dorsal vertebræ presents itself externally. Sometimes it shews itself on the posterior or lateral, or even on the anterior part of the chest, having penetrated through one of the intervertebral spaces. More commonly it makes its way downwards through the posterior mediastinum, and behind the small muscle of the diaphragm; and then, taking the course of the psoas muscle, passes behind the crural arch, and shews itself in the anterior and upper part of the thigh. It is not uncommon for the abscess to form a large tumour on one side of the abdomen, occupying the whole, or a great part, of the space between the false ribs and the groin, pushing the viscera to the opposite side, and, at last making its way to the surface through the abdominal muscles. But a great length of time may elapse before it reaches this termination. I have known such an abscess to remain neither increasing nor diminishing in size, nor being materially changed in its situation, for several successive years: in some in-

stances being a soft and compressible tumour, in which the fluctuation of matter was distinctly perceptible; in others, appearing like an irregular mass of solid substance, closely attached to the posterior and lateral parts of the spine." 260.

When the lumbar vertebræ are affected with caries, there is usually pain in the region of the loins, which is aggravated by stooping, by suddenly turning round, or by percussion. Sometimes the pain is confined to the vertebræ themselves; at others, it extends to the sides of the abdomen and the crista of the ilium.

When an abscess is formed, it usually either descends in the direction of the psoas muscle, and appears in the upper and anterior part of the thigh—or, passing by the outer edge of the quadratus lumborum and sacro-lumbalis muscles, it shews itself on one side of the loins—or in some rare cases, it takes the course of the spermatic chord, and projects through the abdominal ring, where a superficial surgeon might readily mistake it for a hernia—or, descending into the pelvis, it follows the direction of the great sciatic nerve, and proceeds to the posterior part of the thigh. It may reach this situation in another way. Mr. Brodie has known an abscess which, originating in the loins, had presented itself in the groin, disappear from this part suddenly, and, after an interval, be discovered in the posterior part of the limb, behind the lesser trochanter. In a case of this description, Mr. Brodie ascertained, on examination after death, that the abscess had taken the course of the psoas and iliacus muscles to their insertion, and had afterwards extended backwards over the inferior edge of the quadratus femoris. Mr. Brodie makes the observation, that it is not uncommon for abscess connected with caries of any portion of the spine, to alter its course in this manner. He supposes that this circumstance affords an explanation of some of those cases, in which it has been thought that an abscess has been suddenly removed by absorption.

It very rarely happens that caries of the lumbar vertebræ proceeds to the extent of occasioning a perceptible alteration in the figure of the spine. This is easily accounted for by the anatomical formation of those vertebræ. This last consideration will enable us to understand another peculiarity of caries of the lumbar vertebræ—the absence, in the majority of cases, of pains, muscular spasms, paralysis, and loss of sensibility in the lower limbs. In these cases, the thickness of the bodies of the vertebræ is commonly sufficient to prevent the caries from reaching the theca vertebralis. In one case, in which the patient *did* complain of numbness of the legs and thighs, Mr. Brodie found, on dissection, that the *theca vertebralis* was in no part exposed; but that there was a large abscess on each side, surrounding the origin of the anterior crural and obturator nerves, and thus explaining the diminished sensibility of the parts to which they were distributed.

"In systematic works on surgery, the lumbar or psoas abscess is usually described as if it were (in some instances at least) a specific or primary disease, having its origin in the psoas muscle. But, according to all the experience which I have had in these cases, this is altogether a mistaken view of the subject. I cannot say that such an abscess never takes place in the loins; but I certainly believe that it is of very rare occurrence. In examining cases of lumbar abscess after death, I have always found caries of the vertebræ, in which the abscess has manifestly originated. In general the disease of the vertebræ has been so obvious, that it could not have been overlooked by the most superficial observer; but, in some instances, the real nature of the disease has not been detected until

after a careful dissection. In one instance, on examining the body of a patient who died in St. George's Hospital with an extensive suppuration in the loins, the soft parts having been entirely removed, not the smallest appearance of disease presented itself in the lumbar vertebræ, and I conceived that I had at last met with a case of genuine psoas abscess; when, almost accidentally, a small opening was discovered on one side of the spine, in a part which had been covered by one of the attachments of the psoas muscle, just large enough to admit a common probe, and forming a communication between the cavity of the abscess, and one of the intervertebral spaces. On a further dissection, it was ascertained that the intervertebral cartilage had been completely destroyed by ulceration, except at its circumference, and that the opposite surfaces of the bodies of the two contiguous vertebræ were extensively carious." 263.

The consideration of the symptoms of caries of the spine is succeeded by a chapter on its treatment.

This is comparatively obvious and simple. The principal difficulty experienced by the surgeon is in ascertaining the nature of the malady. That determined, the principles which guide his practice are neither obscure nor difficult of application.

It might be supposed that none could be bold enough to call in question the prudence, and few to deny the indispensable necessity of rest in the horizontal posture, and that for a considerable period. Counter-irritation, in the shape of caustic issues, is also a remedy that would readily occur to the mind of the reflecting surgeon. These means, with the administration of the remedies adapted to the general condition of the patient in each individual case, appear to constitute the essential items of the treatment.

From the moment that the nature of the case is ascertained, the patient should be confined to his bed or couch. Where severe pain is experienced in the vertebræ, the patient will readily submit to this discipline; but where the suffering is inconsiderable, the persuasions and the firmness of the surgeon are required to indicate and to enforce its paramount necessity. The bedstead contrived by Mr. Earle will be usually most convenient. Where the disease has existed for a length of time, and much angular curvature of the spine has taken place, the patient should rather lie on his side than on his back, or, if this be disagreeable or inconvenient, he should be so supported by cushions and pillows that the position in which he is may not tend to restore the spine to its original figure. Mr. Brodie adds an earnest and important caution to those who are inclined to meddle with diseased spines, and attempt or affect to remove the displacement by mechanical means, or by manipulation. It is scarcely necessary to expose the ignorant and mischievous absurdity of such persons.

When the disease is situated in the dorsal or the lumbar vertebræ, the patient may be provided with a bandage, including some stripes of whalebone, and somewhat resembling the stays worn by females, but extending as low as the symphysis of the pubes, the os sacrum, and the great trochanter, and as high as the neck. This will operate like splints, fixing the pelvis and thorax in the same relative position. A less efficient support may be given to the cervical vertebræ by means of a cushion adapted to the shape of the lateral and posterior parts of the neck, and extending from the upper part of the back to the occiput.

Mr. Brodie concurs with those who advocate the use, and maintain the advantages of caustic issues. He acknowledges, at the same time, that

some cases occur, in which they appear to be productive of little or of no utility. He seems disposed to think that in diseases of the spine, as in those of the joints, issues are of most benefit where the intervertebral cartilages are affected, and of least advantage where the vertebræ are affected with scrofulous disease. We need scarcely add that the former cases are those in which there is most pain. Mr. Brodie is also of opinion, that issues are applicable to the early stage of caries, and are valueless after suppuration has occurred.

The duration of the treatment is an important consideration. It is difficult to lay down a general rule. The issues may be healed on the first clear evidence of the formation of abscess; otherwise, if they occasion little or no inconvenience, they may be kept open for one or two years. The recumbent position should not be abandoned in less than six or seven months, even when the disease is in its earliest stage; and, in the great majority of cases, the period should be extended to a year, and sometimes to a year and a half.

"In the first instance, the surgeon usually finds it difficult to persuade the patient to continue this part of the treatment for a sufficient length of time after the removal of the more urgent symptoms. Afterwards, however, he has to encounter a difficulty of an opposite kind. This happens especially among young females; who often become at last so habituated to their couch, and the peculiar mode of life connected with it, that they can scarcely be persuaded to make the necessary effort to sit up and move about, even after every reason for not doing so has vanished. I know an instance of a lady, who, under these circumstances, has preserved the horizontal position for twelve years; and in whom nearly all the joints of the lower extremities, in which no actual disease ever existed, have, from mere want of exercise, become firmly ankylosed; so that it seems more than probable that nothing which can now be done will enable her to regain the use of the limbs, or even to sit up." 270.

The treatment of abscesses connected with a carious condition of the spine requires no peculiar observation. As a general rule, the patient should not venture to take exercise, nor even to quit the recumbent posture until the abscesses are healed. But Mr. Brodie mentions the case of a gentleman who had laboured for thirty-two years under well-marked symptoms of caries of the spine:—angular projection backwards, opposite the middle dorsal vertebræ, and sinuses communicating with them in a state of caries. This gentleman, with all this extent of disease, had been able to take violent exercise in hunting and in shooting, and had suffered from no material inconvenience, excepting the loss of the use of his lower limbs for a period of three months; this he regained after the application of blisters to the back.

This concludes the chapter upon caries of the spine—one very valuable, from the practical hints which it contains, to the young surgeon and the old. We proceed to another subject.

ON TUMOURS AND LOOSE CARTILAGES IN THE CAVITIES OF JOINTS.

Mr. Brodie has not much to offer on the subject of loose cartilages in the joints, the complaint having been so frequently described by writers.

In the majority of cases which he has witnessed, no symptoms of inflam-

mation have preceded their appearance. He therefore thinks it probable that in some instances they are generated, like other tumors, in consequence of some peculiar morbid action. They appear to be situated originally, either on the external surface, or in the substance, of the synovial membrane; since, before they have become detached, a thin layer of the latter may be traced to be reflected over them.

"My own experience is much in favour of the removal of these loose cartilages by an incision of the joint, provided that this be done in a cautious and prudent manner. The patient should be kept in a state of the most perfect quietude for two or three days preceding, and for several days after, the operation. The cartilage having been well fixed, the different parts over it should be slowly and separately divided until it is exposed. The wound of the synovial membrane may be dilated by means of a probe-pointed bistoury, until it is of sufficient size to allow of the cartilage being extracted with a tenaculum; and the cut edges of the skin should be instantly replaced in contact with each other, and secured by means of adhesive plaster." 272.

Mr. Brodie has seen two cases in which the loose cartilages were of a different nature from those above alluded to. It occasionally happens that a bony ridge is formed, like a small exostosis, round the cartilages of the joint. In the two cases to which Mr. Brodie refers, this preternatural growth of bone had taken place, and portions of it had been broken off and lay loose in the cavity of the articulation.

Small Pendulous Excrescences in the Knee-Joint.

These spring from the synovial membrane, are numerous, pendulous, have a smooth external surface, and resemble in appearance the appendices epiploicæ of the great intestine, though they do not, like them, contain adipose substance. Mr. Brodie has seen three preparations of this description. With the history of one he is unacquainted—there is reason to believe that long-continued inflammation of the synovial membrane was the cause of the excrescences in another—and in the third, they were accompanied with the collection of a considerable quantity of whey-like fluid in the joint.

Other Tumors in the Joints.

1. In a case of the late Mr. Ewbank's, at St. George's Hospital, a tumor existed within the knee-joint, situated on the edge of the patella and over the external condyle of the femur. It appeared like a loose cartilage, of about the size and form of an almond, and it produced such symptoms as loose cartilage occasions. Mr. Ewbank made a careful incision on the tumor, which proved to be of a gristly structure, and to be attached by one extremity to the synovial membrane, near the edge of the patella. This attachment was cut through, and the tumor was removed. The wound healed, and the patient experienced much relief, but six weeks afterwards a tumor was discovered in the knee of smaller size than that which had been removed, but occupying the same situation. This tumor could be pressed into the joint with the fingers, but did not slip into it in walking. When the patient left the hospital, he did not suffer any inconvenience from it.

2. A young man consulted Mr. Brodie on account of what seemed to be loose cartilage of the right knee. In certain motions of the joint a tumor

presented itself on the inside of the patella, which appeared to be a loose cartilage of large dimensions. The symptoms supported this suspicion. He was desirous of an operation. This was cautiously performed by Mr. Brodie. The tumor was found to be of fleshy structure, and to be connected with the synovial membrane, below the patella, by a broad adhesion. Mr. Brodie divided it and removed the tumor. All subsequent precautions were adopted, but violent inflammation supervened, and required very active treatment. At the end of two months, the knee was neither swollen nor painful, but was still incapable of perfect flexion and extension.

"On examining more accurately the tumor which had been removed in this case, it was found to be about two inches and a half in length, and one inch and a half in breadth, and somewhat less than half an inch in thickness in the thickest part; convex on one surface and somewhat flattened on the other. It was of a firm fleshy structure. The general appearance of it a good deal resembled that of the coagulum which is found in the sac of aneurism; but it was not laminated; it had a smooth membranous surface; and it was manifestly organized, as vessels might be distinctly traced ramifying through its substance."

Mr. Brodie confesses that an exact acquaintance with the nature of the tumor in the two preceding cases, would probably have made him pause before he ventured to remove them by an operation. Yet, even with the narrative of those cases placed before us, it is difficult to ascertain the distinctive characters of tumors of this nature. Perhaps, a careful examination might enable us to determine that the tumor does not present the same degree of hardness as cartilage. It is fortunate that the latter is so much more frequent than the former as to render the chance of a mistake inconsiderable.

OF MALIGNANT DISEASES OF THE JOINTS.

Mr. Brodie observes that the bones are well known to be liable to those morbid growths and alterations of structure, which are usually denominated malignant diseases.

"In the cases which have fallen under my observation, carcinoma of the bones has never occurred as a primary disease, but has always been preceded by carcinoma of the breast or some other glandular organ. The existence of the disease in the bones has been indicated by pains, sometimes slight, at other times most severe, resembling those of deep-seated rheumatism, but not yielding to the use of the remedies by which rheumatic pains are usually influenced. In these cases, the bones themselves become unnaturally brittle, and are so easily broken, that I have more than once known a fracture of the femur to be produced by the patient accidentally turning herself in bed; and, in one instance, a fracture of the clavicle took place on the patient making some slight effort in raising her arm." 280.

Mr. Brodie relates two cases of cancer of the bones. In the first, the head of the femur was affected, and the symptoms in some degree resembled those produced by disease of the hip-joint. The patient had undergone the operation for the removal of a scirrhus breast, and the disease had reappeared in the cicatrix. The femur was fractured at the seat of the disease by a very slight injury immediately before or after death. The whole of the superior extremity of the thigh-bone was softer and more brittle than natural, a change which was most distinct in that part of the head contiguous to

the cartilage. On making a section of the head and neck of the bone, the earthy matter was found to be very deficient, and a cartilaginous or gristly substance was seen blended with the bony structure. In several places there were spots of increased vascularity with a deposition of some cheesy matter in the centre.

In the second case, the alteration attacked the spine. The patient had scirrhus of the breast, and was suddenly seized with paralysis of the whole lower part of the body. On dissection, several of the dorsal vertebræ were converted into a structure closely resembling that of the femur in the last case. The whole of the lower portion of the theca vertebralis was filled with a serous fluid.

Mr. Brodie observes that the bones are much more liable to be affected with fungus hæmatodes than with scirrhus, and that the former frequently occurs in them as a primary disease. Mr. Brodie has seen several cases in which a tumor of this description had its origin in one of the bones of a joint. It is obvious that such in its progress affecting contiguous parts must gradually render the joint useless, and end in its destruction.

"In these cases the patient first complains of a slight degree of pain in the affected part, which is somewhat aggravated by exercise. Some time afterwards the bone is observed to be slightly enlarged. As the tumor increases, it is found to be elastic in some parts, hard in others. For a considerable time it does not interfere with the functions of the joint; which, however, afterwards becomes limited in its motions, and, ultimately, completely fixed in one position. I have never known but one case in which the patient did not submit to amputation before the disease had reached its most advanced stage; and here the skin became ulcerated, and a large ill-conditioned sore was the consequence." 285.

Amputation is the only remedy, and those best acquainted with the results of operations for fungus hæmatodes will most readily appreciate the slender chances of success from even this cruel expedient. Mr. Brodie relates two cases of fungus hæmatodes, in which amputation was performed. In one the lower part of the femur was affected; in the other the head of the tibia was concerned. It is four years since the operation was performed for the first patient, and no return of the malady has taken place. Mr. Brodie does not mention the termination of the second case, but we understand that the patient died with pulmonary symptoms in less than a year after amputation.

OF SOME OTHER DISEASES OF THE JOINTS.

Such is the heading of the ninth chapter of the work. The subjects included in the general designation are the following:—exfoliation of the epiphysis of a bone, as a consequence of acute inflammation—chronic inflammation of the epiphysis, sometimes terminating in abscess in the bone contiguous to the joint—absorption of the cartilages by a process which apparently differs from inflammation—anomalous pains in hysterical females referred to the joints or their vicinity—unusual liability to dislocations of the joints—osteo-sarcoma—a peculiar disposition between the dura mater of the spinal marrow and the bodies of the vertebræ—gouty alteration of a joint—acute ulceration of the cartilages—differences in the length of the two lower limbs. On these various affections Mr. Brodie offers in succession some remarks.

1. *Exfoliation of an Epiphysis from Acute Inflammation.*

Acute inflammation of the shaft of a bone and of its periosteum is usually arrested at the epiphysis. But some instances occur in which the epiphysis itself is attacked, and more or less extensive exfoliation is the consequence. Sometimes nearly the whole of the epiphysis is deprived of its vitality; at other times only one small portion of it, or several are affected. In some of these cases, the exact nature of the disease is sufficiently obvious; but in others, where the exfoliations are of a very small size, it is difficult or impossible to form an exact diagnosis. This is, however, of the less importance, as, under all circumstances, such a disease must terminate in the complete destruction of the joint; so that there is no remedy but amputation.

2. *Chronic Enlargement and Abscess of the Epiphysis.*

Chronic enlargement of the epiphysis from inflammation is not an unfrequent occurrence. It is liable to be mistaken for disease of the joint itself, especially as inflammation of the synovial membrane sometimes ensues as a secondary consequence. The patient may derive benefit from the treatment which is applicable to nodes in other portions of the bones.

Abscess in the centre of the bone contiguous to the joint is another result of chronic inflammation of the epiphysis. This produces excessive suffering, and has occasioned, perhaps frequently, amputation of the limb. Mr. Brodie has advocated the use of the trephine, pointing out the symptoms characteristic of the disease, and the value of the remedy alluded to, by a series of interesting cases. The description of this complaint was originally offered to the public by Mr. Brodie in the 17th volume of the *Medico-Chirurgical Transactions*. It was fully noticed in the 35th Number of this *Journal*, that for January, 1833. We must refer our readers to the number in question for a full account of the important observations of Mr. Brodie. We therefore pass on.

3. *Absorption of the Cartilage, independently of Inflammation.*

It is sometimes observed that the bone becomes partially denuded of cartilage, without any marks of inflammation. There is no erosion of the bony surface itself, and the remaining cartilage retains its natural adhesion to it. The patient does not complain of pain in the joint, nor does suppuration follow. These changes are observed more frequently in the bodies of elderly persons; and they are sometimes discovered after death, where their existence had not been suspected during the patient's lifetime. At other times, they produce in the motions of the limb a grating, corresponding to, but less distinct than, the grating which is perceptible after a fracture.

4. *Pains in the Joints in Hysterical Females.*

Instances are not uncommon of pains referred to the large articulations in hysterical females. These cases give rise to much anxiety, yet ultimately bad consequences seldom ensue.

"At first there is pain referred to the hip or knee, or some other joint, without any evident tumefaction; the pain soon becomes very severe, and, by degrees a puffy swelling takes place, in consequence of some degree of serous effusion into the cells of the cellular texture. The swelling is diffused, and, in most instances, trifling; but it varies in degree: and I have known, where the

pain has been referred to the hip, the whole of the limb to be visibly enlarged from the crista of the ilium to the knee. There is always exceeding tenderness; connected with which, however, we may observe this remarkable circumstance, that gently touching or pinching the integuments, in such a way as that the pressure cannot affect the deep-seated parts, will often be productive of much more pain than the handling of the limb in a more rude and careless manner. In one instance, where there was this nervous affection of the knee, immediately below the joint there was an actual loss of the natural sensibility; the numbness occupying the space of about two or three inches in the middle of the leg. Persons who labour under this disease are generally liable to other hysterical complaints; and, in all cases, the symptoms appear to be kept up and aggravated by being made the subject of constant attention and anxiety." 303.

No general rule can be laid down, says Mr. Brodie, for the treatment of cases of this description. In fact, it may be broadly stated, that the measures applicable to the relief of the hysterical condition, are those which are required for this. To make this remark, is to state that the individual case must be studied. In one hysteric female, the menstruation is profuse—in another it is absent or defective; in one the bowels are extremely torpid—in another they are regular; in one the nervous system is peculiarly excitable—in another it is sluggish; in one the circulation is languid—in another the blood-vessels are loaded—in all there are irregular determinations of blood. The practical surgeon or physician must have witnessed these various conditions in females who are subject to the lengthened and the varied train of hysterical disorders. The management of the individual case requires and displays the judgment and resources of the medical attendant.

Some local applications appear to Mr. Brodie to be serviceable. When the pain is most severe, the patient occasionally derives benefit from the use of the following embrocation, applied tepid.

R. Spiritus rosmarini, ℥iss.
Mist. camphoræ, ℥viss.
M. fiat embrocatio.

Or, a liniment of camphor and belladonna has seemed to be productive of advantage.

R. Liniment, camph. comp. ℥iv.
Extracti belladonnæ, ℥ij.
M. fiat linimentum.

Mr. Brodie observes that medical treatment is subservient, after all, to moral management. The patient's attention must be diverted from her complaint to other and engrossing objects; she should mix in society; take exercise out of doors, especially on horseback; rise early; and assume in all respects the habits of a healthy person.

"In general, it is not difficult to distinguish the cases which I have just described from those of more serious disease. Careless surgeons, however, frequently fail in their diagnosis; and even surgeons of experience do so in some instances. I do not hesitate to say, that a large proportion of young ladies, who have heretofore been supposed to labour under disease of the hip-joint, and the great majority of those who have been treated as suffering from caries of the spine, have, in reality, been affected with these local hysterical symptoms, and nothing more. Except where there is a question concerning life and death, no error in surgical practice can be more dangerous than this; as it may lead to a

patient being confined to her couch, almost in solitude, for months, or even for years, who ought to be taking exercise, and breathing the fresh air, and partaking of the amusements, and enjoying the society of those of her own age." 305.

Perhaps there are few affections in which mistakes are more frequently committed by the generality of surgeons than in this. Yet its frequency in one form or another renders it a matter of the utmost consequence, both to the surgeon and the patient, that the former should be well acquainted with its nature. We could almost have desired that Mr. Brodie had entered more fully on its history, and had dwelt at greater length upon its symptoms. He might usefully have drawn from his large store of facts and of experience, more particular descriptions and more copious observations for the benefit of the mass of the profession. As it is, we would recommend an attentive study of the brief remarks which Mr. Brodie has offered.

5. *Unusual Liability to Dislocations of the Joints.*

A gentleman twenty-three or twenty-four years of age, consulted Mr. Brodie in the year 1820. He had met with the accident of dislocating the patella four times in the right, and once in the left knee. The right shoulder had been twice completely dislocated, and once there had been a subluxation of the same joint. The joint of the left thumb, with the *os trapezium*, had been dislocated several times. In every instance the dislocation had been reduced with the greatest facility, and generally without surgical assistance. The gentleman was in good health, and no peculiarity could be detected in the form and structure of his joints. His muscles were strong, and he was capable of considerable muscular exertion; he was accustomed to a good deal of walking exercise, but had not been particularly exposed to the ordinary mechanical causes of dislocation.

6. *Osteo-Sarcoma in the neighbourhood of Joints.*

Mr. Brodie relates one case, and alludes to three others, in which this disease fell beneath his observation. The first case was that of a lady. The part affected was the knee, and the tumor attained such a size that amputation was performed by Mr. Thomas. The tumor occupied the upper part of the knee, beginning at the edge of the cartilaginous surface, and extending about three or four inches up the lower part of the thigh. It was interposed between the muscles and the bone of the thigh, so that the former were seen expanded over it. It was of a greyish-white colour; composed of fibres of a gristly semi-transparent substance, with osseous matter intermixed with it, and about two inches in thickness on each side of the femur. At the upper part it was seen distinctly originating in the periosteum; at the lower part the periosteum could not be traced, and the structure of the bone was continued into that of the tumor. The cartilages and ligaments of the joint were free from disease.

Mr. Brodie observes that there can be no question of the original disease being osteo-sarcoma, and of its origin in the periosteum of the femur. In the other three cases alluded to the disease was connected with the hip. The patient appeared to labour under an enormous tumor of this joint. Mr. Brodie was only able to examine one case by dissection. The hip itself was free from disease, and the enlargement was formed by an osteo-sarcomatous growth from the periosteum of the upper extremity of the femur.

7. *Peculiar Deposition on the Spinal Dura Mater.*

Mr. Brodie appears to have seen but one case of this description, and he relates it, not only for the purpose of displaying the peculiar malady, but also with the view of illustrating the observation previously made—that disease affecting the cervical portion of the spinal chord produces paralysis of the upper extremities in the first instance, and of the lower extremities afterwards.

Case. A young man, after leading a very irregular life, and after much exposure to damp and cold was seized, in January, 1829, with a violent pain in the neck, succeeded by considerable swelling. This was chiefly situated on the right side, extending from the head to the shoulder. Although the patient neglected himself the pain and swelling in a great degree subsided. In the beginning of the following April, the upper extremity of the right side became affected with paralysis. Afterwards the opposite limb became, to a great extent, paralytic also. He remained in this state till June, when he came under the care of Mr. Brodie.

“At this time he complained of some degree of pain in the back of the head and neck; and he found it difficult to move the head from one side to the other. An enlargement and induration of the soft parts of the neck was still perceptible in the situation of the original swelling. There was complete paralysis of the muscles of the right arm, forearm, and hand: those of the opposite limb were also paralytic, but some of them were still capable of acting feebly, so that he could take hold of the right hand with the left, and move it from one position to another. The muscles of the lower limbs were feeble, but were capable, nevertheless of supporting the body in the erect posture.

The bowels were very torpid, and the evacuation of a dark colour, a good deal resembling tar in appearance.

The urine was slightly alkaline, but voided without difficulty.” 310.

Leeches, a seton, mercury were employed without effect. The lower limbs became paralytic, and, in the latter end of June, the patient died, having previously been comatose.

On dissection, the ventricles of the brain were found to contain about two ounces of watery fluid, and the brain itself was unusually soft. The cervical portion of the spinal chord was also softer than natural.

“A quantity of soft solid substance, of a grey colour, apparently lymph, which had become organised, was found situated between the dura mater and the bodies of the vertebræ, occupying the whole of the anterior and some of the posterior part of the vertebral canal, and extending from the occiput downwards, as low as the fourth cervical vertebra.

A substance similar to that which was found on the inside of the vertebral canal was also found lying on the fore part of the bodies of the cervical vertebræ, extending over the oblique and transverse processes, and communicating with the internal mass by processes extending through the spaces in which the nerves are situated, and surrounding the nerves themselves. The external mass was much larger than the internal, being not only thicker, but extending lower down in the neck. In some parts it was not less than an inch in thickness: in other parts thinner, and, altogether, it was of a very irregular shape.” 311.

8. *Gouty Alteration of the Joints.*

These are remarkable. The cartilages are absorbed; the exposed sur-

faces of bone are partially or entirely encrusted with a white earthy matter, apparently lithate of soda; and sometimes they have the appearance of being worn into grooves. In some cases, repeated and long-continued attacks of gout occasion complete ankylosis.

9. *Acute Ulceration of the Cartilages.*

Mr. Mayo has published some cases of this description, and Mr. Brodie has also seen some. Our readers will perceive an account of them in the article contained in the last number of this Journal.

10. *Difference in the Length of the Lower Limbs.*

"It occasionally happens that the two lower extremities are not of precisely the same length; and this may be the result of original formation, the femur and tibia of one side being respectively longer than those of the other side. If the whole of this difference amounts, as it sometimes does, to an inch, or an inch and a half, the individual is observed to limp in walking, and the great trochanter belonging to the longer limb is higher and more prominent than that of the other; and this might lead a superficial observer to mistake the case for one of diseased hip." 313.

In some instances disease is a cause of difference in the length of the two limbs, a diseased bone not keeping pace, in growth, with a sound one. But Mr. Brodie relates a case in which, after necrosis of one femur, the thigh was found by careful and repeated measurement to be an inch and a quarter longer than its fellow. These circumstances should be remembered, as a patient might erroneously be supposed to be labouring under disease of the hip-joint, in consequence of the alteration of the figure of the limb.

We now arrive at the tenth and last chapter. It is dedicated to the subject of inflammation of the *bursæ mucosæ*.

ON INFLAMMATION OF THE BURSE MUCOSÆ.

Under the general designation of *bursæ*, Mr. Brodie includes, for the sake of convenience, the membranes forming the sheaths of the tendons.

"Inflammation of the *bursæ mucosæ* is marked by nearly the same characters, and (allowance being made for the difference of the parts with which they are connected) produces nearly the same results as inflammation of the synovial membranes of the joints. In the greater number of instances, it occasions an increased secretion of synovia. In other cases the bursa is distended by a somewhat turbid serum, with portions of coagulated lymph floating in it. Occasionally it terminates in the formation of abscess. Sometimes the membrane of the bursa becomes thickened, and converted into a gristly substance. I have seen it at least half an inch in thickness, with a small cellular cavity in the centre containing synovia. At other times, although the inflammation has continued for a very long period, the membrane of the bursa retains nearly its original structure." 317.

Inflammation of the *bursæ* may be the consequence of pressure or of other local injury—of abuse of mercury, of rheumatism, or of some other constitutional affection; in the latter cases it is frequently combined with inflammation of the synovial membranes of the joints. Sometimes it assumes an acute, more frequently a chronic form.

The inflamed bursa forms a tumor, more or less distinct, according to its situation; more or less painful, according to the character of the inflammation. If superficial fluctuation is perceptible at first, and if, under these circumstances, the inflammation is considerable, the surrounding parts are implicated, and the skin is red. When the disease has existed for any length of time, the membrane has generally become thickened, sometimes to the extent of making the bursa resemble a solid tumor.

When the inflammation is of long standing, it is not unusual to find floating in the fluid of the bursa a number of loose bodies, of a flattened oval form, of a light brown colour, with smooth surfaces, resembling small melon-seeds in appearance. There seems to be no doubt that these loose bodies have their origin in the coagulated lymph which was effused in the early stage of the disease, and Mr. Brodie has traced the steps of their gradual formation, from irregular masses, of no determined shape, to smaller portions, and ultimately to the flat oval bodies, described. Motion and pressure are the agents of change.

When suppuration takes place in a bursa, the abscess sometimes makes its way directly to the surface of the skin, and bursts externally. But Mr. Brodie suspects that, in other cases, the matter first escapes into the surrounding cellular texture, and the case is then liable to be confounded with those in which the abscess originates in this tissue. Mr. Brodie is induced to entertain this suspicion, from the consideration of the following circumstances.

"There is no bursa more liable to be inflamed than that between the patella and the skin; and inflammation of it not unfrequently terminates in suppuration, as I have ascertained to be the case, both by the discharge of pus, when the tumour has been punctured, and by dissection after death. It is very common to find a large abscess on the anterior part of the knee, which the patient describes as having commenced over the centre of the patella in the situation of this bursa. The abscess has a somewhat peculiar character. It raises the skin from the patella, so that the latter cannot be felt, and from this point as from a centre, it extends itself between the skin and the fascia, equally in every direction, covering the whole of the anterior part of the knee. A superficial observer, judging from the general form of the tumour, and the fluctuation of fluid, without noticing the greater redness of the skin, and the circumstance of the fluid being over, instead of under, the patella, might mistake the case for one of inflammation of the synovial membrane of the joint itself. Such an abscess must be supposed to commence either in the bursa above mentioned, or in the cellular texture. The original situation of the disease corresponds to that of the bursa: there appears to be no reason why an abscess of the cellular texture should occur in this precise spot, more frequently than elsewhere; and hence, it is reasonable to conclude, that the bursa is the part in which the abscess begins. It is not improbable that many other abscesses of the extremities may have a similar origin. The tumour which occurs in the inside of the ball of the great toe, and which is one of those to which the name of bunion has been applied, occasionally suppurates; and I have found, on dissection that this is formed by an inflammation of the bursa, which is here situated." 320.

It frequently happens that, after the inflammation has entirely subsided, a disposition to the secretion of a preternatural quantity of fluid still remains, and dropsy of the bursa is the consequence. Such tumors are very frequent in the neighbourhood of the wrist, and are sometimes confounded with ganglions. The enlarged bursa on the anterior part of the wrist has somewhat

peculiar characters; it is bound down in the centre by the strong annular ligament, which binds down the flexor tendons; and it is prominent above and below, where the superjacent parts afford a smaller degree of resistance. Pressure made on the upper part of the tumor causes the fluid to pass altogether into the palm of the hand, and, in like manner, pressure on the lower part of it causes it to ascend into the fore-arm.

These are all the remarks which Mr. Brodie offers on the history and symptoms of inflammation of the bursæ. He next proceeds to the consideration of the treatment.

In the first instance, this should be guided by the principles which usually regulate our management of inflammatory affections. Leeches, lotions, blisters will be requisite, and colchicum, or such constitutional remedies as appear to be adapted to the individual case, will readily occur to the mind of the experienced surgeon.

When dropsy of the bursa has occurred, the application of a splint or bandages to obviate motion, and of blisters, kept open by the savine cerate, are the best means of promoting the absorption of the fluid. But when the loose bodies resembling melon-seeds, are contained in the bursal cavity, it is necessary to evacuate them by a puncture. Having noticed that the supervention of suppuration, after this trifling operation, was usually productive of a permanent cure, Mr. Brodie has sometimes been induced to procure the suppurative process artificially, by the introduction of a seton or tent into the wound, or by opening the bursa freely, and dressing the cavity with lint. Even where the bursa forms the sheath of one or more tendons, this method may be employed with safety; provided that the bursa has no communication with the cavity of the neighbouring joint.

"We must, however, proceed with caution where the bursa is dilated to a considerable size. Inflammation and suppuration of a large bursa sometimes disturbs the constitution in so great a degree, that it may be doubtful whether it would be prudent, in this instance, to do more than simply puncture the tumour, keeping the patient in a state of perfect quietude afterwards. A large swelling, formed by a cyst distended with serum only, or with serum and masses of coagulated lymph floating in it, occasionally is met with over the inferior angle of the scapula; originating either in the large bursa mucosa, which is interposed at this part between the *scapula* and the *latissimus dorsi* muscle, or otherwise in one of the bursæ of the shoulder, protruding from underneath the muscles by which that joint is surrounded. I had an opportunity of seeing a tumour of this description, which had attained a magnitude not much less than that of a man's head. I understood that the cyst was afterwards punctured, and a seton passed through its cavity, and that so much disturbance of the general system ensued, as to occasion death. I have seen another case, in which death took place in a short time after such a tumour was punctured: but here the patient was otherwise in bad health, and that strict attention was not paid to his being kept in a state of quietude after the operation, which the circumstances seem to have required. I shall give an account of a more fortunate case of the same kind hereafter." 323.

Where the coats of the bursa have become much thickened, there appears to be no remedy but its removal by an operation. This is applicable to superficial bursæ only; for where they envelop the tendons, it would be impracticable, and where they communicate with the cavity of a joint it would be improper. Mr. Brodie has only found occasion to perform it on the bursa which intervenes between the patella and the skin. The readiness

with which new bursæ, or organs which perform their office, are generated in situations in which they are required, would dissipate any uneasiness, were it entertained, respecting the removal of a diseased one.

Mr. Brodie relates five cases, illustrative of the history and treatment of diseases of the bursæ. At these we shall cast a hurried glance.

In the first case, the bursa over the patella was enlarged and contained fluid; but its coats were very little thickened. Ordinary means having failed, Mr. Brodie punctured the tumor, and irritated its interior with the blunt end of a probe. Suppuration ensued, and a cure was effected.

In the second case, the bursa over the inferior angle of the scapula was enlarged to the size of a cocoa-nut. Mr. Brodie punctured it with an abscess-lancet, and discharged about a pint of turbid serum, with some irregularly-shaped masses of coagulated lymph. Suppuration ensued, but, after the expiration of three months, it had ceased, the wound cicatrized, and no remains of the tumor were perceptible.

In the third case, the bursa enveloping the extensor tendons of the wrist was enlarged to about the size of a double walnut, and was filled with fluid. This was discharged by a puncture, but re-accumulated, and Mr. R. Keate made a longitudinal incision in the skin over the tumor, and dissected out as much as possible of the bursa, leaving only that part of it which enveloped the tendons. Suppuration ensued. In a few weeks after the wound had healed, the tumor re-appeared with the same characters as before, but of only half its former size. In that condition it has since remained.

In the fourth case, Mr. Brodie dissected out a thickened bursa from between the patella and the skin. The parietes were more than half an inch in thickness. The patient was cured.

In the fifth case, a tumor, having all the characters of an enlarged bursa, appeared in the site of one which had been removed from between the patella and the skin. Mr. Brodie was compelled to cut into it, and to dress the wound with lint, which measures were productive of a cure.

The last fourteen pages of the work are occupied with a refutation of the arguments of Mr. Key, on the mode in which the cartilages of joints are ulcerated. We have dwelt so much upon this subject, that it does not seem necessary to enter on it again.

Here, therefore, we part from Mr. Brodie. To express our real feelings on the merits of his work might be construed into adulation. We observed at the commencement of our analysis, for a review it has not been, that we held up the book to the medical world as a valuable model. We have placed its substance before our readers—have diffused its accumulated facts—displayed its spirit of philosophical induction; and we venture to indulge the hope, that those of our elder brethren who are not familiar with it will become so, and that every young surgeon will consider it an indispensable ingredient in his library, meagre as his circumstances may compel it to be. It is not merely that the mass of information is great, but the admiring reader observes with gratification and instruction, the application of an original mind to a complicated subject, and the philosophical truth of the inferences elicited by a strict adherence to inductive reasoning. The theorist will seal the merits of the author, by hinting that he displays no graces of fancy, no charms of imagination. Again we recommend every surgeon and physician to purchase this edition.

PHYSIOLOGIE VEGETALE. Par M. A. P. De Caudolle, Tome 3.
Paris. Béchet Jeune, 1832.

THESE three volumes are devoted to the physiology of vegetables, being a continuation of a work which is to embrace the whole science of plants. In 1827 M. De Caudolle published two volumes on the structure of vegetables; he has now added three others on their vital functions, and if time, health, and inclination permit, he promises to complete the series by discussing the principles of classification, geographical, and fossil botany, and the application of the whole science to the cultivation of plants, and to their dietetic and medicinal uses. He tells us that he has revised this work completely at four different periods; in 1804, when he delivered his first course at the College de France; in 1812, when lecturing at Montpellier; in 1829, when preparing a course of Botany at Geneva; and when bringing out the present volumes. The Royal Society, which numbers among its members many botanists most capable of estimating the value of this undertaking, have very lately shewn their high sense of the estimation in which they hold it, by presenting M. de Caudolle, their gold medal. The botanical student who has had access to adequate libraries, and has experienced the labour which the perusal of many monographs on the same subjects by different writers demands, the confusion produced by opposite statements, and the difficulty of forming any correct judgment on disputed points, will hail with pleasure a comprehensive summary of the actual state of the knowledge of this important branch of physiology, from the pen of one eminently qualified by his learning, opportunities, and industry, to collect facts and experiments relating to vegetable life, and by his practical knowledge of the subject and mature judgment to decide on their real value. For as Montaigne has wisely said, "ce n'est pas assez de compter les expériences; il les fault poiser et assortir, et les fault avoir digérées et alambiguées pour en tirer les raisons et conclusions qu'elles portent."

The arrangement of these volumes is clear and methodical, each section corresponding with another section in the work which preceded it, so as to afford every facility of reference to the description of the part whose vital functions are explained. There are five principal sections; the first is devoted to the general phenomena of vegetable life; the second to vegetable nutrition, including the ascent and descent of the sap, the chemical changes which the atmospheric air undergoes, the various secretions and excretions, with a detailed chemical history of the numerous vegetable principles; the third section explains the reproduction of plants, a subject embracing their generation, gestation, and germination, their multiplication by division; hybrids, varieties, monsters, &c.: the fourth contains an account of certain phenomena common to nutrition and generation; such as abortion, metamorphosis, grafting, the direction of plants or of parts of plants; their movements, temperature, odour, colour, taste, consistence, age, the real or apparent suspension of vitality, transplantation, and temperament: the fifth section comprehends the action of external agents on plants; such as light, electricity, temperature, air, water, and soils, injuries accidental or otherwise, the effects of poisons, the ravages of animals, the influence of parasi-

tical plants on others, and of the proximity of plants of the same species. There are few points in vegetable physiology of more general interest than the changes produced in the atmospheric air, by vegetables, and as M. De Caudolle has given the most lucid explanation of the phenomena that we remember to have read, we will give a condensed abstract of the chapter. Bonnet having placed some green leaves under water where they were exposed to the sun, saw bubbles of air rise from their surfaces. In order to determine whether this air came from the leaf, or the water, he placed the same leaves in the same circumstances under water that had been deprived of air by ebullition, and as no bubbles of air were produced he concluded that the phenomenon did not depend on any action of the leaf itself. This apparently logical experiment, led him however to overlook one of the most important facts in vegetation. Thirty years afterwards, Priestly, when engaged in his experiments on gases, observed the same phenomenon. He however collected the bubbles of air, and by analysis discovered that they were nearly pure oxygen gas. This attracted the attention of vegetable physiologists, particularly of Senebier and T. de Saussure, who proved it to be connected with the most important laws of vegetable life. The conditions indispensable to the production of this gas are, the green colour of the plant, the direct rays of the sun, and the presence of carbonic acid gas in the water. Experiment shews that no parts which are not green, as roots, old trunks, petals, stamens, &c. with but one or two exceptions of coloured leaves, will produce oxygen gas. The green part of the plant must also be alive, for dead plants, although still green, evolve no oxygen. This evolution does not take place unless the immersed leaves are exposed to the direct action of the sun; the clearest diffused light, or the brightest lamps produce no such effect. Finally, all kinds of water are not suitable; the action does not go on if the water has been deprived of air by distillation or by boiling, or if it has been impregnated with nitrogen, hydrogen, or oxygen gases; but, on the contrary, if the water contains carbonic acid gas, then the green leaf, aided by the action of the direct solar rays disengages oxygen. The following experiment of Senebier's, which is one among many hundreds, is conclusive. A branch of a raspberry bush which produced no gas in distilled water, furnished in common water a volume of gas equal to 108 grains of water; and in water charged artificially with carbonic acid gas, a volume of gas equal to 1664 grains of water. From such facts he concluded that the carbonic acid gas dissolved in the water is under the influence of the direct solar rays decomposed by the green parts of vegetables, the leaf most probably fixing the carbon, whilst the oxygen, becoming free, escapes. The same physiologist proved by the following experiment, that leaves also decomposed the carbonic acid which was transmitted to them by the roots, that is, dissolved in the fluid which they absorb from the soil. He placed two branches of a peach tree beneath receivers containing water, the lower ends of the stems which protruded were placed in bottles, one of which contained water charged with carbonic acid gas, the other was empty. The branch whose extremity was plunged in water charged with carbonic acid gas disengaged a quantity of oxygen gas equal to 4815 grains of water, whilst the oxygen gas disengaged by the other was only equal to 2535 grains of water. Thus, nearly half of the oxygen gas exhaled by the first appeared to be furnished by the water in contact with

the leaves, and the other half by that of the water absorbed by the extremity of the stem. This explains why some fleshy leaves give out oxygen under distilled water, as their sap contains a little carbonic acid gas. If deprived of the air they contain by being placed beneath the receiver of an air-pump they then give out no oxygen gas when immersed in distilled water. That the carbon remains fixed in the plant appears from several reasons very probable. 1. This is the only means in the present state of our knowledge for accounting for the deposition of carbon in vegetables. 2. The green matter of leaves contains a great proportion of carbon. 3. Plants deprived of solar light, or etiolated, do not disengage oxygen gas, and contain less carbon than others. Some experiments of M. Goeppert render it probable that the quantity of carbonic acid never augments in these plants during vegetation, so that which was originally contained in the seed from which each sprang, becomes spread through the whole tissue of the plant. As in these experiments the plants have been immersed in water, and therefore placed in an unnatural situation, some physiologists have doubted their conclusiveness under other circumstances, particularly as no difference can be detected in the composition of the air in forests or in deserts. However, the mobility of the air would account for this, and direct experiments have been made to resolve the question. Thus Palmer placed green branches in a vessel containing atmospheric air exposed to the sun's rays, and after 10 or 12 hours found an increase of about a fiftieth part of oxygen in the vessel. M. Theodore de Saussure has endeavoured to accomplish the same end by placing vegetables in circumstances more similar to their natural condition. Thus he has grown plants both in the sun and in the shade in an atmosphere containing small and ascertained quantities of carbonic acid, and he has found that in the sun plants flourished in an atmosphere which contained not more than a twelfth of carbonic acid gas, whilst in the shade the smallest additional quantity of this gas was injurious to the vegetation. His most instructive experiment however was the following. He reared many periwinkles from seeds, and by a previous analysis ascertained the average quantity of carbon contained in the young plants of a known weight and size. He placed seven in a receiver containing $7\frac{1}{2}$ per cent. of carbonic acid gas mixed with atmospheric air, their roots being plunged in distilled water, and seven others in similar circumstances with the exception of the air being deprived of all carbonic acid gas. He exposed the receivers to the sun. Six days afterwards he removed the plants, which were uninjured; there was no carbonic acid gas in the first receiver, but $24\frac{1}{2}$ per cent. of oxygen instead of 21. The carbonic acid had thus been decomposed by the periwinkles, but the whole of its oxygen had not been exhaled; the periwinkles themselves were found on analysis to contain 2.28 grains of carbon more than before the experiment, whilst those which had lived in the air deprived of carbonic acid gas had lost a little carbon. Similar experiments on four other plants gave the same result, with some variation in the quantity. The experiments prove that the green parts of plants in the sun decompose the carbonic acid of the air, appropriate its carbon, which increases their solid matter, retain a small quantity of oxygen, and set the rest free. In total darkness this change does not go on, but it is far from improbable that in the diffused day-light the decomposition may take place, although too feebly to be appreciated by analysis. For, 1st, if, as every thing leads

us to believe, the green colour is owing to the decomposition of carbonic acid gas, the pale but decidedly green hue of those plants exposed to diffused day-light alone, proves that the same action must be going on, although more feebly. M. De Caudolle has also seen etiolated plants become green when exposed to the light of six lamps, without their disengaging a *sensible* quantity of oxygen gas. 2. As plants die when deprived of every means of decomposing the carbonic acid gas of the air, and yet live and often prosper in the shade, it is probable that they must even under such circumstances decompose a small quantity.

De Saussure has discovered that if green leaves are placed in a receiver of atmospheric air during the night the quantity of nitrogen is not sensibly altered, but that some oxygen has disappeared. Fleshy and marsh plants inspire the least oxygen, trees in general more than herbs, and trees with deciduous leaves more than those which are persistent, and young leaves of all sorts more than old ones. This oxygen inspired by the green parts of vegetables during the night does not remain in an elastic state, for neither the air-pump nor heat can disengage it. It does not become incorporated with the solid part of the plant, because the action of the solar light disengages it easily. It appears, then, that at the time of inspiration it is united with the carbon dissolved in the sap, and that it forms there carbonic acid gas, during the night, which is anew decomposed by solar light. The plant then appropriates the carbon, and a small quantity of oxygen, whilst the rest of this gas, mixed with a little azote existing in the tissues, is exhaled in the air during the day.

The relation which those parts of a plant which are not of a green colour hold to the atmospheric air may be reduced to this simple law, that all these organs do not assimilate the oxygen of the air, but both by day and night this oxygen abstracts a portion of their carbon, and thus forms a certain quantity of carbonic acid gas, which sometimes becomes free in the atmosphere, at other times is dissolved, either in surrounding water, or in the water of vegetation, and thus in both cases may be re-decomposed by the green parts. This decarbonization of those parts of plants which are not green appears to be necessary to their health. Trees suffer if their roots are buried so deeply as to prevent the access of the atmospheric air to them. It is partly owing to the same cause that trees whose roots are inundated suffer and die; that light soils are more suitable to vegetables having long roots; that at a certain depth the radicles are protruded horizontally, and not vertically; that the lateral roots are in general nearer the surface of the soil; that roots suffer more from the contact of stagnant water, although richer in nutritive matters than from running water, which brings to them incessantly a little oxygen, and that finally, those roots which live in water-pipes, where there is little oxygen, appear to be obliged to multiply their surface, by pushing out a multitude of little roots in order to abstract a greater quantity of the gas. De Saussure has confirmed these practical results by direct experiments. He placed the roots of young chesnut trees in contact with different gases, and found that those whose roots were plunged in gases deprived of free oxygen, died in a few days, whilst those placed in atmospheric air prospered. The latter diminished the quantity of oxygen gas and formed with it by means of their own carbon a corresponding quantity of carbonic acid gas. Bulbs, rhizomas, and in general the sub-

terranean parts of stems which are not green are in the same condition as roots. Flowers not only part with a portion of their carbon to the oxygen of the air, but exhale a little nitrogen; the quantity varying from 1,500 to 45,500 of their volume. It is well known that carbonic acid gas is formed during germination, and that this decarbonization is necessary to their growth. This action of the air on those parts of vegetables which are not green cannot be considered as a truly vital effect, but as a chemical property inherent in these bodies. Indeed, this action goes on in wood and bark after death; and Rumford has proved by direct experiments, that carbon, which has been considered as one of the most fixed bodies that is known, may become united with oxygen and form carbonic acid gas at a temperature much below that at which carbon will visibly burn. The order of arrangement of this series of composition and decomposition of carbonic acid gas is somewhat obscure. M. De Caudolle proposes the following arrangement as the most natural.

1. The water entering vegetables through their roots is charged with carbonic acid, which is carried along with the sap to the green parts where it is decomposed by the solar light; the carbon is fixed, and the oxygen escapes in the form of gas.

2. The carbonic acid gas which those parts of vegetables which are not green have formed with the oxygen of the air, is partly dispersed in the atmosphere, partly dissolved in the water of vegetation, and carried with this water as it is absorbed by the roots, to the leaves, where it is decomposed.

3. The water absorbed by the roots holds in solution a certain quantity of animal or vegetable matter which contains carbon; this carbon is carried by the sap into the green parts; it continues during the night with the oxygen absorbed by them, and in the morning this carbonic acid formed in the leaves, is decomposed by the solar light, as if carbon could not be usefully deposited in the nutritious juices of plants, unless it was formed by the decomposition of carbonic acid.

4. The green parts which are in contact with air or water charged with a small quantity of carbonic acid gas, abstract it, decompose it, and reject the oxygen. If the quantity is more than a twelfth, it acts on the leaf as a poison.

Thus the result of this extensive function, which may be considered as vegetable respiration, is to fix carbon in the plant, whilst the purpose of animal respiration is to diminish the quantity of the same principle. The eudiometric influence of vegetable respiration on the atmosphere, may, perhaps, after these considerations, be estimated with some exactness. Living vegetables vitiate the air. 1. Because all those parts which are not green form carbonic acid with their own carbon and the oxygen of the air. 2d. Because their green parts absorb during the night a small quantity of oxygen gas. The nitrogen exhaled by the flowers is a temporary and very feeble function, not of sufficient consequence to be taken into account. On the other hand vegetables purify the atmosphere by exhaling during the day a marked quantity of oxygen gas, and at the time of vegetation the days are much longer than the nights. This latter effect is more considerable than the former, for the result of vegetation is to increase the quantity of carbon in a vegetable; now, no molecule of carbon can be fixed there, unless a corresponding quantity of oxygen gas is set free in the air. De Saussure

has confirmed this by experiment. He introduced a small branch covered with leaves and still connected with the tree, into a large round bottle of air, the mouth of which he closed. At the end of two or three weeks the air in the bottle was found to contain a greater quantity of free oxygen than before the experiment.

"Thus, experience as well as theory tends to prove, that living vegetables augment daily the quantity of the free oxygen gas of the atmosphere. This is a compensation for the oxygen absorbed in combustion, in animal respiration, and by dead or dying vegetables. The winds unceasingly mix together every part of the atmosphere, so as to make the whole homogeneous, although in certain places one of these functions may be more active than the other. It is by this mechanism that a fixed quantity of oxygen is maintained in the atmosphere, and thus from the humble functions of vegetable life we are led to the exalted contemplation of the universal order of the world."

This extract will give a general notion of the lucid and complete manner in which M. De Caudolle treats his subject; a subject which has excited, we are sorry to say it, very little general interest in this country. There is some truth in what are called popular prejudices, and unquestionably there is a very common disposition to call in question the advantages of the study of botany. If there are any good reasons for this prejudice, they are derived from the mistaken object for which this study is pursued too often. How many after having collected specimens of every species of plants in their neighbourhood, and having pressed them, neatly pasted them on paper, and written beneath them their Latin names, think that they have accomplished all that their opportunities will allow them, and flatter themselves that they are good botanists. But what have they acquired? A knowledge of the shape of the flowers and leaves, and of the number of the pistils and stamens of a few hundred indigenous plants, the first step perhaps to a knowledge of botany, but no more capable of making a botanist in the philosophical acceptation of the term, than would the study of the words in Walker's Dictionary or a Greek Lexicon be sufficient to make an English or a Greek scholar. A similar error is indeed often made in the study of languages; the acquirement of the language itself being considered the ultimate object, and not the stores of knowledge which such an acquisition may put at the student's disposal. This is, as an acute writer has said, making language not the instrument but the end of instruction; as the negro worships his kettle for its own sake and not for its utility. The simile will well apply to the exclusive admirers of the Linnean system. Dr. Lindley has within the last few years energetically endeavoured both as a writer and a lecturer to dispense with an artificial arrangement of plants altogether, and to substitute the so-called natural one; for he had himself felt the unsatisfactory nature of his acquirements even when he was imagined to be an excellent Linnean botanist. Perhaps he has carried his antipathy to his first master too far to be just, for it is very questionable whether any artificial adaptation of the natural system will be equal as an index to that of Linneus; for it must be recollected that however natural the Natural system may be, yet that an artificial division must be appended in order to save the time of the learner in ascertaining the names of those families with which he is unacquainted. But although it might be inconvenient to do away with

the Linnean arrangement as an Index, it is not to be regretted, that Mr. Lindley, in his ardour for the promulgation of a more scientific one, has gone to extreme lengths, for he is more likely by such means to excite attention to the true object of artificial classification, and thus to induce more extensive investigations. One of the great benefits of the Natural system is, that its primary divisions are founded on internal structure, and therefore there is a greater probability of its leading the student to inquire into the anatomy and physiology of plants, so as to give a somewhat philosophical character to his investigations, and thus to raise botany in the general opinion to that high rank in the sciences which it undoubtedly should hold. The excellent introduction to Botany of Dr. Lindley, and the translations of Richard's *Elémens de Botanique*, will do much to accomplish the same purpose, and those who are disposed to enter more deeply into the study of the structure and functions of plants will find in these volumes of M. De Caudolle, and in those which have preceded them, a fund of matter as valuable and as well arranged as was ever brought together to elucidate any similar subject.

AN INQUIRY INTO THE NATURE OF SLEEP AND DEATH, WITH A VIEW TO ASCERTAIN THE MORE IMMEDIATE CAUSES OF DEATH, AND THE BETTER REGULATION OF THE MEANS OF OBIVATING THEM; BEING THE CONCLUDING PART OF THE AUTHOR'S EXPERIMENTAL INQUIRY INTO THE LAWS OF THE VITAL FUNCTIONS. (Republished from the Philosophical Transactions.) By A. P. W. Philip, M.D. &c. &c. 8vo. pp. 254.

OUR first glance over the title-page of this volume engendered a hope that Dr. Philip had discovered some means of baffling the grim tyrant Death, by depriving him of the weapons by which he cuts down man at all periods of existence. A more close examination, both of the title and the body of the work, has lessened our hopes, and left us in possession of the facts, that diseases and even disorders of the vital organs and functions, carry us off *before* the age of three score years and ten—and that, even if we are fortunate enough to escape sickness, TIME itself will moulder us into dust *after* that epoch! If ever man deserved immortality, Dr. Philip is that man; for he has studied the “laws of the vital functions,” till, we should imagine, he has them all by heart. But if our worthy and indefatigable author has not been able by any experiments on animals, to secure himself from the grave, he has done enough to transmit his name and his fame to posterity—(which is all that the most talented can do, or the most ambitious expect)—and that too notwithstanding the Ulyssean stratagems of Prout, or the Ajax-like lounges of Earle against the “laws” laid down by Dr. Philip.

As most of the papers in this volume have been long before the public, it is not our intention to notice more than the last two chapters, on sleep and death. Nor shall we go very minutely into these. The former subject is a drowsy, and the latter is a melancholy one. Most people indeed, would

rather enjoy the refreshment of a sound sleep, than listen to the most philosophical discussion on its nature and causes. However, as physicians and philosophers must have many sleepless hours, they may as well amuse themselves with a discussion on this, as on any other subject. Dr. Philip's long dissertation on sleep may be brought into a very narrow compass. There is no organ or structure in the body, neither heart, arteries, muscles, or glands, that can carry on uninterrupted action—Dr. Philip to the contrary notwithstanding—and, therefore, the sensorial functions require their period of rest, as well as those of the stomach or any other part. The brain is tired during the day, by the reception of sensations and the exertion of reflections, volitions, &c. and at night we sleep. Dr. Philip maintains that the arteries are in *perpetual* action. We deny it, nor would a thousand experiments on frogs or rabbits convince us of this perpetuity. Dr. Philip admits that the heart appears to have a periodical relaxation, and cessation of its proper stimulus, the blood. Now the heart is never free from the presence of blood, as Dr. Philip must know. The ventricle never empties itself entirely. But as the systole occupies only about a third part of the time occupied by the diastole, it follows that the muscular fibres of the heart are sixteen out of the twenty-four hours in a state of inaction. This is about the period of rest which is enjoyed by the voluntary muscles. The same argument applies to the arteries. If we recollect right, Dr. Philip maintained, in opposition to Dr. Parry, that the arteries contracted and dilated like the heart, though in different rhythms. If this be the case, they have their alternations of labour and repose, like other muscular structures. The muscles of respiration, we need not say, have the same proportions of rest. Even the secreting organs, as the liver and kidneys, which appear to be more perpetually in action than almost any other parts of the human frame have, in reality, alternate labour and repose. Secretion may never, perhaps, entirely cease; but it is periodically in activity and inactivity, comparatively, which answers the same purpose. As to the veins, it will not be said that they are in perpetual action. During the greater part of their time, they are merely passive hydraulic machines, or tubes to convey the blood from one part to another.

Dr. Philip maintains that that part of the brain which supplies nervous energy to the vital organs, as the heart, arteries, &c. is in a state of perpetual or uniform excitement. This may be so; but, if we are correct in shewing that the functions of these organs are in alternate action and repose, we do not see why the brain itself should not be similarly situated? We shall give Dr. Philip's conclusions, however, in his own words, as containing the pith of the paper.

“From a review of the whole of the facts which have been laid before the Society, it appears,—

1. That in the brain and spinal marrow alone reside the active parts of the nervous system.

2. That the law of excitement in the parts of these organs, which are associated with the nerves of sensation and voluntary motion, is uniform excitement followed by proportional exhaustion, which, when it takes place to such a degree as to suspend their usual functions, constitutes sleep; all degrees of exhaustion which do not extend beyond them and the parts associated with them, being consistent with health.

3. That the law of excitement in those parts of the brain and spinal marrow

which are associated with the vital nerves is also uniform excitement, but which is only, when excessive, followed by any degree of exhaustion, no degree of which is consistent with health.

4. That the vital, in no degree partaking of the exhaustion of the sensitive system in sleep, only appears to do so from the influence of the latter on the function of respiration, the only vital function in which these systems co-operate, in consequence of which its organs, without being in any degree debilitated, are less readily excited.

5. That the law of excitement of the muscular fibre, with which both the vital and sensitive parts of the brain and spinal marrow are associated, is interrupted excitement, which, like the excitement of the vital parts of these organs, is only, when excessive, followed by any degree of exhaustion. And

6. That the nature of the muscular fibre is every where the same, the apparent differences in the nature of the muscles of voluntary and involuntary motion depending on the differences of their functions, of their relation to the brain and spinal marrow, and of the circumstances in which they are placed." 150.

Dr. Philip has appended some observations on dreaming, which have nothing particularly novel in them. Although the sensorial powers of the brain become so exhausted that sleep ensues, it does not follow that they are so completely exhausted as not to receive impressions, though indistinctly. It is these faint impressions, from within or without, that cause dreaming. These causes are chiefly from irritation in the digestive organs, as every one who has eaten a heavy supper—or who has weak powers of digestion, must well know. The silence and quietude that generally prevail during sleep tends, also, to promote the perception of sensations then, which otherwise would pass unheeded even when we are wide awake, and when the mind is employed in the avocations of the day. The rapidity of the operations of the memory and imagination, during sleep and in the act of dreaming, is most curious and unaccountable, and so are the incongruities which then occur, and which appear perfectly natural and correct to the dreamer. Dr. Philip endeavours to explain these phenomena in the following manner, but with what success we shall not decide.

"It seems greatly to influence the phenomena of dreaming, that in order to favour the occurrence of sleep, and thus as far as we can prevent unnecessary exhaustion, means are always employed at its accustomed times, to prevent, as much as possible, the excitement of the external organs of senses, and consequently those parts of the brain associated with them. This renders us the more sensible to causes of excitement existing within our own bodies, while, by the inactivity of the parts of the brain which are associated with those organs, we are deprived of the usual control over such parts of the mental functions as are thus excited; the effect of which is greatly increased by the rapidity of the operations of the memory and imagination, when not restrained by some of the various means employed for that purpose in our waking hours. These are often objects of the senses, as written language, diagrams, sounds, and sometimes even objects of touch; but the most common is the mere use of words, independently of any object presented to our senses.

Any one may easily perceive how difficult it is to pursue a train of reasoning without this means of detaining his ideas for the purpose of steadily considering them and comparing them together. Now, in sleep, in consequence of the excitement of the brain being so partial, we are deprived of all these means; and our ideas pass with such rapidity as precludes all consideration and comparison. Our conceptions, therefore, are uncorrected by experience, and we are not at all

surprised at the greatest incongruities. Why should we be surprised at our moving through the air when we are not aware that we have not always done so? The mind of the dreamer differs from that of the infant in having been variously impressed, and therefore in the capability of having its impressions recalled. But it is only as far as it is excited, that any impression can be recalled. With this exception it is as void of the results of experience as the mind of the infant; and therefore, in its partial excitement, of the means of correcting any particular train of ideas suggested. In general, there is neither time nor means for reflection, and, consequently, there can neither be doubt nor hesitation.

Such is the rapidity of our thoughts in dreaming, that it is not uncommon for a dream, excited by the noise that awakes us, and which, therefore, must take place in the act of awaking, to occupy, when put into words, more than fifty times the space in the relation. It is a good illustration of what is here said, that when we dream that we are conversing, and thus obliged to employ words, the usual incongruities of dreaming do not occur. The ideas are sufficiently detained to enable us to correct the suggestions of the imagination. No man ever dreamt that he was telling another that he had been flying through the air.

Thus the peculiarities of dreaming arise from the partial operation of the causes of disturbance, and some of the sensitive parts of the brain being capable of excitement without disturbing the others; and thus it is that the more near we are to awaking, the more rational our dreams become, all parts of the brain beginning to partake of the excitement; which has given rise to the adage, that morning dreams are true." 153.

NATURE OF DEATH.

Dr. Philip does not pretend to rend the veil that covers the nature of death in a metaphysical sense of the word. There are some expressions in the opening of this paper which we can hardly agree in. Dr. Philip says that all our knowledge is not acquired, through the medium of our senses, after we are born. "We come into the world with *knowledge* essential to our existence." How does our author support this position? Because, says he, "the infant *knows* as well how to *breathe* and suck as the adult, and these acts depend as much on *mental* operations as those which are the result of experience." Indeed! the act of breathing depends on *mental* operations, when that same act goes on in the profoundest sleep, or in deadly apoplexy, when no mental operation goes on at all! Really, we are astonished that the author of a treatise on the vital functions should assert that the breathing of an infant, when first launched into this world, depends on mental operations. If he had said on *cerebral* operations, there might have been some truth in the assertion; but we maintain that breathing has nothing to do with mental operations—excepting when we are blowing a fire or a flute, which will hardly be called ordinary respiration. We do not deny that the child is born with a few *instincts*, chiefly the art of *sucking*, and that is almost the only one. This instinct or impulse has no analogy to acquired knowledge at all. The instinct cannot be resisted either by infant or animal. It is as much an *involuntary* action as breathing itself. The child will suck when asleep. We believe with Locke, and many others, who have not been deficient in human understanding, that the mind, or rather its organ, is a complete blank when we are born, and that all knowledge is written there afterwards by sensation and reflection. This last may combine and multiply knowledge, but all the raw materials must come through the senses. We do not consider the instinctive impulse to sucking as any species of know-

ledge. The smell of the mother's milk excites the olfactory and gustatory nerves of the infant, in the same way that dust would excite coughing, or snuff sneezing. There would be no great pretence to knowledge in either of these processes, we calculate. Dr. Philip, gives us another piece of information which we confess we were quite ignorant of before. Speaking of this same new-born infant, he says—"he perceives his wants, and he knows how to relieve them." To this we demur. We believe that the infant feels some few of his wants, as the want of food; but we also believe, and indeed we are certain, that he does *not* know how to relieve himself; and, therefore, he squalls out most lustily, till his mother or nurse supplies him. When an infant feels cold, does he know how to relieve himself by additional clothing? Really we never heard such loose, not to say erroneous, reasoning, from any one professing to be an experimental philosopher, as we find in this book.

We find it utterly impossible to give any thing like a connected view of the paper under consideration, since it refers at every page, and almost in every paragraph, to "my inquiry into the Laws of the Vital Functions"—or "the Papers which I had the honour of publishing in the Philosophical Transactions"—all or any of which we have neither time nor inclination to peruse or re-peruse. We are not certain, indeed, that we can always comprehend our author; and in such cases we must adopt the language and conduct of Parliamentary reporters, who, when they cannot hear a word of the orator, inform their readers that "they understood him to say," &c. &c. We understand Dr. Philip, then, to hold that, in the more perfect animals, there are three distinct classes of functions—the sensorial, the nervous, and the muscular, not directly dependent on each other, but only through the influence of their respective organs, the destruction of any one class soon leading to the destruction of the others. The sensorial functions, constituting the sensitive system, and connecting man with the external world, first fails, in natural death, the nervous and muscular systems continuing for a time, but ultimately failing, "in consequence of the failure of respiration, the only vital function to which the co-operation of the sensorial power is necessary." Thus, after all our learning and science, we come to the old conclusion, that "man dies for want of breath." Another conclusion to which the light of science has led us, has long been come to without science at all—namely, that death is only an everlasting sleep.

"The state which immediately precedes the last act of dying then, according to the common acceptation of the term, and sleep, depend on a failure of function in the same organs. In what, then, consists the difference of these states? The most evident is, that the one is a temporary, the other a final failure; and it will appear, that in the only death which can strictly be called natural, the state of the sensitive system which immediately precedes death differs from its state in sleep in no respect but in degree." 163.

Our author asserts, and the assertion is highly consolatory, that "we are not necessarily born to suffering." Is this quite consistent with Scripture? "All natural states (says Dr. Philip) with the exception of child-bearing (and, in its most natural state, even this is hardly an exception), are more or less pleasurable." Does the infant cut its teeth, even in the most natural state, without some suffering? We apprehend that it does not. Those

who dread death on account of the *agonies* which are usually considered as its attendant, may derive consolation from the following passage.

"The death of old age, therefore, is literally the last sleep, uncharacterized by any peculiarity. The general languor of the functions in the last waking interval is attended with no peculiar suffering, and the last sleep commences with the usual grateful feelings of repose, the last feelings experienced; for with what takes place after them, the feelings, being suspended, have no concern." 166.

This pleasing picture (and we believe it to be a correct one) of the last scene in man's "strange eventful history," is darkened by the reflection that, in civilized life, we rarely see an instance of natural death, as above-described—at least at the natural period of human existence. Dr. Philip inform us that, "of the various instances of death which he has witnessed, there was not one that could be regarded as wholly the effect of age." We have seen more than one instance, where death appeared to be the effect of very advanced age, and where there was no cognizable or tangible disease. We think that when a man dies, worn out by 80 or 90 years, he may fairly be said to die the death of nature. The late Sir Gilbert Blane died in his 85th year, and we are not aware that he laboured under any disease. It is, however, very rare to find all the organs so balanced in strength, that no one gives way under the numerous morbid causes to which we are exposed before the threescore years and ten. Still, even when we are brought to the grave by premature disease, the last scene is the death of nature after all. Look at the individual dying of fever, consumption, apoplexy, &c; we see him lie for hours in a state of stupor, the sleep of death, unconscious of surrounding friends, and insensible to sufferings if they actually exist. It is long before the act of dying, that the individual suffers from the effects of disease. When the malady has brought him to the last act of the drama, the sufferings are over, and he sleeps, or perchance dreams, away the last hours of his existence. But we must draw our notice of Dr. Philip's work to a conclusion with the following extract, the observations in which are very rational and correct.

"The approach of death, if we are aware of it, must always be more or less impressive, not only because we are about to undergo an unknown change, but are leaving all that has hitherto interested and been grateful to us. Even here, however, for the most part, the laws of our nature are merciful. Most diseases of continuance (for we shall find there are some exceptions) not only gradually impair our sensibility, but alter our tastes. They not only render us less sensible to all impressions, but less capable of enjoying as far as we are still sensible to them. The sight of a feast to a man who has lost his appetite is disgusting, and a similar change takes place in a greater or less degree with respect to all other means of enjoyment.

These circumstances constitute a great part of the difference of our feelings with respect to what, in common language, is called a violent and a natural death. In the latter, as far as the sensibility is impaired, we are more or less in the state of old age, and, in addition to this change, our tastes are perverted. By these means, the relish for life is in a great degree destroyed before we lose it. Thus in disease, the most timid often meet death with composure, and sometimes, as I have repeatedly witnessed, with pleasure. I have even known the information that the danger was passed, received only with expressions of regret." 187.

We heartily wish that Dr. Philip would treat us to a good sound dish of

original information, instead of hashing up, in so many new shapes, the fragments of former meals, some of which have got stale, and others not over-wholesome. Let Dr. Philip ponder on what the reviewer of his works, in the last Number of the *Edinburgh Medical and Surgical Journal*, says on this subject:—

“In almost every page, the author’s *peculiar* opinions, physiological and pathological, are *inextricably* mixed with the more immediate object of the treatise, so that, to enter into any discussion on the subject would be, in fact, to review the author’s former works.”*

We are not, therefore, singular in our strictures on this hashing system of bibliography. If Dr. P. was an ordinary writer, and incapable of producing original works, there might be some excuse for compilation; but he has not this excuse to make, and would not, we apprehend, be very fond of making it, if true.

A NEW SYSTEM OF ORGANIC CHEMISTRY. By *F. V. Raspail*. Translated by *W. Henderson*, M.D. Octavo, pp. 602. London, 1834.

THIS is one of the most ingenious and original works which we have perused for a long time. M. Raspail is evidently a man of superior talent, and this talent is happily associated with the most unwearied zeal and assiduity: his imagination, indeed, like that of most of his countrymen, is apt to be too vivacious, and the celerity of many of his conclusions may somewhat exceed the credulity of a reader on this side of the Channel: but, barring this, every one who peruses the present work must feel pleasure in awarding to M. Raspail the praise of being a most clever chemist, and a subtle and original thinker. From his own account, we are led to suppose that he has been ill used, and that his countrymen, and more especially the members of the French Institute, have been for many years his sworn enemies, and tried in every way to rob him of his fair deserts. We have seen it stated somewhere, that all his devotedness to chemical pursuits had not been able to keep him out of the broil of political agitation, and that, whether justly or unjustly we cannot tell, his one-sided sins had been visited by the public authorities with “*durance vile*.” He confesses, indeed, the want of patronage and the want of funds in the prosecution of his labours; but these seem only to have redoubled his enthusiasm, and many a humble student of our classes and colleges may be inspired by our author’s appeal, when he tells him “not to be discouraged, when his fortune does not permit him to realize the plan which has at first presented itself to his mind. How often, after having cursed my poverty, and despaired of the success of my trials for want of money, has it happened to me that I have, by a sudden thought, conceived the

* *Ed. Journal*, July, 1834, p. 178.

idea of an article not worth a penny, which served every purpose that could have been answered by a more expensive apparatus."

This work is entitled a "New System of Organic Chemistry;" *new*, not because it is the most recent, but because it is constructed on different principles, and is developed in a different manner, from what has been attempted by preceding authors. M. Raspail very justly remarks, that chemists have hitherto taken but a very limited, and, therefore, an unscientific view of the composition of organic substances, and he traces most of their errors to their attention having been confined to the mere results of analysis in the laboratory, without appealing to other sources of information. The crucible, the test-tube, the blow-pipe, &c. may be all quite necessary to such an enquiry, but they ought not to be the only tools we work with; and before, indeed, we have recourse to so rude and destructive weapons, our author very aptly exhorts the use of others, which are alike more easy of employ, and often as potentially useful. By far the most important of these is the microscope, and, with its wonderful aid, we shall find that our researches are at once made both more amusing and instructive. Had M. Raspail no other claim to our approbation, save that of having introduced this instrument as an essential constituent of the chemist's apparatus, he would have deserved well of science; for although others, among whom we record with especial praise our eminent countrymen, Wollaston, Young, and Brewster, had previously employed it in their enquiries, yet Dr. Henderson is quite justified in asserting that M. R. has "made a more universal application of it to organic chemistry than had before been done, by any one who was able to avail himself of the more accurate principles of chemical science that have been established by the enquiries and discoveries of late years."

There is so much truth, so well expressed, in the following observations, that we cannot deny ourselves the pleasure of extracting them; and their value is enhanced by the consideration, that the spirit which they breathe ought to animate, not only the philosophic chemist, but also the physiologist, the botanist, and natural historian.

"Now Nature is not to be considered as either a Chemist, or a Botanist, or a Zoologist, or a Mineralogist, or a Physiologist. It is not divided into scientific compartments. It does not proceed according to classifications and artificial systems. It is a single cause producing varied combinations.

It is, therefore, absurd to study these combinations only in one view; and yet this is almost precisely what the different sciences have done to this day; and this is the cause of a multitude of errors and misconceptions, and of the dispiriting slowness of the progress of scientific research.

We must, therefore, have recourse to a more rational method—to a more philosophical way of proceeding, if we would arrive at more positive results.

Now this new method may be summed up in these terms.—To borrow from each science all that may be useful for ascertaining a fact, or establishing a law; for, although a book may very properly be special, being a collection of a certain order of facts, an Observer, who confines himself within the circle of a speciality is either incapable or inconsequent.

Certain substances being by natural processes deposited within certain organs, I shall appeal to Anatomy for the means of recognising these organs; and, when once I have learned to distinguish them, I shall apply to Chemistry for the information which its reactions and its processes can furnish. If these organs are too small to be seen by the eye simply, I shall employ the assistance of the magnifying-glasses of the microscope. Physical science will teach me to follow the

course of the luminous rays, and will give me a knowledge of the effects of refracted and reflected light; and I shall establish a chemical laboratory on the object-holder of the microscope." xv.

It would be quite inconsistent with the general scope of this review, devoted as it is to the more immediately practical departments of professional inquiries, to enter upon an examination of this work in detail; but in our capacity as supervisors of medical literature, we feel it a duty to draw the attention of all who are interested in the delightful pursuits of chemical science to the "new system" of M. Raspail, as a work admirable alike for the ingenuity of its speculations, and for the mass of instructive material contained in its pages. A chemist would do well to con over, and try by the test of direct experiment almost every proposition as he goes along. We should be prepared indeed to hear that he dissented from many of their data and inferences, but we shrewdly suspect, that the very refutation of these would lead him to some very important and unexpected results; for there is the germ of genius pervading almost every portion of the work.

We shall content ourselves with selecting certain passages which either apply more immediately to medicine, or are calculated to enlighten the general reader.

At page 176 our author states—

"It has been observed that cotton cloth, however fine, cannot, without injury, be substituted for linen in the preparation of surgeon's lint; and some authors have imagined that they had found the reason of this, in the shape of the fibres of cotton, which, according to them, are triangular, and with sharp angles capable of cutting and irritating the flesh. This explanation, which at best is ridiculous, has been admitted by authors of note in chemistry, who are in general sufficiently difficult on the explanation of facts. Yet it was very easy to see that so minute organs, even if they were as sharp as was supposed, could do little harm, when separated from the living flesh by an inert coagulum. Besides, the microscope assures us that this shape of the fibres of cotton exists only in the imagination of those who have not observed them. The fibres of cotton are tubes analogous to the small hairs of the *Gramina* of which I have spoken, although much larger; they become flat by drying, after which they present the appearance of a band with fringed edges and a raised border. An enlarged figure of them was given in a small essay which I published in 1827 in the *Bibliothèque Physico-Economique*. Finally, it is certain also, that these bands or fibres of cotton are much more flexible than the tubes of hemp or of flax. If, then, the lint acted mechanically, that which is made of hemp or flax ought to be more hurtful than that which consists of cotton; and yet experience shows the contrary. We must then seek the explanation elsewhere, and a very natural one is to be found in the phenomena of capillary attraction. The fibres of hemp and flax are tubes open at both ends, and the watering to which they had been subjected has emptied them of all the juices which they contained. Those of cotton, on the other hand, are hairs shut at both ends, and filled with a substance tending to organize, which no watering or washing can remove from them. It is, then, evident that the tubes of linen will be more proper than the hairs of cotton for imbibing blood or pus; for lint made of the latter will not imbibe any thing, but will only allow a free passage among its fibres to any liquid which would have run off just in the same manner without it." 177.

On the curious subject of "muscular contraction," M. Raspail adverts to the doctrine of those who maintain that the fibres of a muscle, when it contracts, assume a zig-zag direction. Prevost and Dumas have lately adopted

this opinion, and endeavoured to demonstrate its truth, by an appeal to certain electro-microscopic observations. Having placed a lamina of muscular tissue in the focus of the microscope, and exposed it to galvanic action, they perceived, we are told, each fibre bend into a zig-zag, forming angles whose apices coincided with the terminations of the nervous filaments. The objections which our author urges against these statements are forcibly conveyed in the following passage:—

“1st, It is difficult to conceive how elastic filaments could form themselves into lines so sharply angled as those figured by the authors of this essay. 2d, They ought to have taught us how to distinguish the muscular fibres from the ultimate filaments of the nervous system. When once the nerves have diminished to the size of the elementary cylinders of muscular fibre, I declare for my part, that it would be impossible for me to distinguish by the microscope what belongs to the nerve and what to the muscle. Anatomists know well that, in following by the lens the nerves to their ultimate ramifications, it becomes very difficult for them to decide on the nature of the texture which they observe; how difficult, then, must it be with the microscope, where very often the eye alone is appealed to, and where the scalpel cannot be employed to trace and unravel the fibres? 3d, Even if these authors did see something analogous to the figures which accompany their descriptions, this experiment would in no way prove what they advance. The muscular lamina is, in fact, necessarily in contact with the object-holder in several points; and, hence, if any tremor be excited in it, either mechanically or by applying the galvanic power to the nervous fibre, this tremor will of itself be sufficient (from the resistance given by the points adhering to the object-holder) to cause sinuous movements, which afterwards in designing the figures have been rendered more or less regular and more or less angular. The result of the observation is then altogether artificial, and cannot in any way be considered as representing what takes place in nature.” 261.

M. R. very properly prefers making the experiment, when a muscle contracts under the influence of the vital force, or of its ordinary stimulus, and assures us that he has repeatedly examined the moving organs of many of the lower animals, such as the foot in the anodontes, gasteropodes, &c. and that he has invariably found that the “contractions took place only by means of a shortening of the muscular fibres, and that this shortening was accompanied by an increase in their diameters, which caused small swellings throughout their whole extent.”

The next subject which we shall select for notice is one which cannot fail to interest the physiological reader, and as the phenomena which we propose describing briefly, have not been alluded to in any of our medical journals, the account of them will possess all the freshness of novelty to our readers. It is now some years ago since Corti in Italy announced that if a portion of the “*chara hispida*” (a cryptogamic plant abounding in our marshes and ponds) be examined under the microscope, a most beautifully distinct circulation of globules may be perceived in each internodium or interval, between the transverse septa, which are seen to divide it into numerous segments or compartments.

The truth of this discovery may be most easily verified by any one, as the plant is most common, and we do not require a powerful microscope for the purpose.

M. Raspail has for the last two years performed a multitude of experiments, and the details of some of those we now propose to communicate.

"Let an internodium of the *Chara Hispida* be detached from the stem by cutting it off beyond the articulations that terminate it at each end, taking care to remove all the verticillated branches. The bark which covers it is to be taken off in the following manner:—The internodium is stretched on a glass plate, whose length is less than the distance between the two articulations, and which is placed in a shallow capsule full of water. Each of the small cylinders of the bark is to be raised with the point of a scalpel, and (taking care not to go too deep) the scalpel is to be carried from one end of the internodium to the other, so as to detach them entirely from the trunk. When all the cylindrical thongs of bark are removed, there is brought into view a thick cylinder incrustated with a white substance which adheres strongly to it and is hard and brittle resisting the edge of the scalpel and assuming a farinaceous appearance on drying. This substance is carbonate of lime, which must be removed with a blunt knife by scraping the tube lengthways, holding the blade perpendicularly. The tube being thus prepared, it is immersed in water and placed in the focus of the microscope. The following phenomena may then be observed:—

Through the transparent sides of the tube two opposite longitudinal currents may be seen. They appear to be separated by a longitudinal line, which may be seen on the opposite sides of the tube, and which is distinguished by its whiteness and transparency from the green and granulated layer that lines the inside of the tube. Each of these currents carries with it globules or clots of different sizes, which show its course, but which never mix with those of the opposite current. Sometimes, however, there are seen, on the line of separation, large globules of a more or less cellular structure, which, being kept at the bottom of the liquid by their specific gravity, are there subjected to the resultant of the two simultaneous and opposite forces of the two opposite currents, and consequently turn round on their axis." 357.

A curious phenomenon connected with this vegetable circulation was discovered by Gozzi, and has been repeatedly verified and illustrated by M. Raspail. If ligatures be put round a portion of the tube, at a short distance from each other, and between any two articulations, and the tube be then cut across, between these and the ligatures (so that we have a tube with factitious articulations) not only will the circulation be found to continue, but after a few days the ligatures fall off, and the ends of the tube remain completely closed by the spontaneous adherence of their sides.

"An artificial tube thus prepared is well adapted for the purpose of observing all the phenomena of the circulation. We see, in fact, that the current when it reaches one of the extremities of the tube, makes the circuit of the round end produced by the adherence of the sides, and immediately assumes the opposite direction." 357.

We are told by our author that there is no partition between the two currents, and he has given directions how to ascertain this point. The smallest interruption of the continuity of the green membrane which lines the tube is sufficient to stop the circulation; or if it still continue for a few moments, it will be seen that the circulating fluid avoids the spot from which the green matter has been removed, and that generally nothing passes across this white spot. The integrity of the green membrane seems therefore indispensable to the existence of the circulation. Accordingly, if we bend the tube in the smallest degree we shall certainly arrest the circulation in its interior. Another condition essential to the continuance of the circulation is the moisture of the plant, and hence—

"If we place a tube peeled and deprived of its incrustation in the focus of

the microscope, moistening it with a small drop of water, we shall see that as the water evaporates the internal motion becomes slower; but, if, when it is just about to stop entirely, we apply a drop of water to any point of the tube, we shall immediately see the portion of the internal liquid adjacent to this moistened part of the tube start as it were and begin to move; and, if we then spread the drop of water with a straw over the rest of the tube, the circulation will be re-established in all its former regularity." 360.

The circulation is immediately arrested when a drop of alcohol, liquid ammonia, of pure fixed alkali, or of acid, either vegetable or animal, is placed on the surface of a peeled tube. (There are several engravings at the end of the volume which very beautifully illustrate many of the preceding statements respecting the circulation in the chara.) To attempt to explain the cause of the circulation, which we have now described, on mere hydraulic principles, as M. Raspail has done, appears to us most unsatisfactory and irrational. The French school of physiologists is, as we have frequently of late taken occasion to notice, fast verging to all the presumptuous decisiveness of cold Materialism, such as characterized their countrymen half a century ago. The last editions of Richerand's and of Majendie's systems of Physiology are every where pervaded with this most unphilosophic spirit; but we are rejoiced to think that it has not yet diffused itself beyond the boundaries of "la belle France," and sincerely happy are we, that by far the boldest as well as the most talented disciple of the Materialist school, on this side of the Channel, has within this very present year, and in this very metropolis, publicly yet spontaneously recanted the errors he had too rashly advocated, and has brought himself to acknowledge, that the operations of living bodies are not to be explained on the principles of mere physical influences, and that it is wiser to confess our ignorance than daringly to challenge the wisdom and goodness of an Almighty power.

The comprehensive scope of M. Raspail's work leads him in different parts of it to allude to some of the highly important subjects which may become the themes of examination and disputes in Courts of Law, and the right decision of which may reflect so much credit and honor on the testimony of the medical witnesses. Well indeed does our author say that—

"A mistake may be corrected in chemistry, but in legal medicine it is irreparable. The sword of the law does not retrace its steps as the opinion of a medical man may; and, for this reason, I have never since 1828 allowed any opportunity to escape of rebuking the temerity with which medico-legal opinions are generally given before the judge." 416.

These few lines are introductory to some valuable remarks which M. R. makes on the question "whether it might be ascertained, to what class of animals blood which had become dry, and had produced a given spot, belonged, by simple inspection of its globules, or even by a chemical examination of them." The affirmative was maintained by a chemist of celebrity in Paris some years ago, but he was soon compelled to renounce this opinion, in consequence of the cogent objections which our author adduced soon after.

"About the same time," we are told, "Orfila, relying on experiments on the large scale, announced, in an essay of considerable length, that a spot of blood may be distinguished from a red spot produced by any other substance. I combated this opinion; and, to prove its incorrectness by experiment, I brought for-

ward spots made with the albumen of a pullet's egg in which I had steeped a small bag filled with *madder* slightly moistened. The effect of the reagents mentioned by Orfila was precisely the same on these spots as on real spots of blood. In a succeeding essay Orfila pointed out a difference between the spots of blood and these artificial spots, viz.—that after being boiled the spot of blood appeared greenish by reflection, while the colour of the artificial spot remained unchanged. I replied, that he had gained nothing by this, inasmuch as the object was not to ascertain whether the artificial spots were identical with the real ones or not—but only to prove how deceptious the reagents mentioned in his essay were, as applied to a substance of so complicated a nature as blood, since he had found it necessary to renew his inquiry and have recourse to new criteria to distinguish a real spot of blood from another part of a kind not previously compared with it; and that it was possible to make a new mixture which this new test would not be able to detect, by adding to the spot of albumen and madder a portion of tannin and of a salt of iron, in such a manner that they should not act on each other till they were boiled together. I added, that nature abounds in mixtures whose study the chemist has not yet entered on, and which might be capable of presenting, on a small scale, the appearance of blood, since this liquid is nothing but a mixture of albumen, dissolved and undissolved, with various salts, a ferruginous colouring matter, and water—substances which might be brought together naturally or accidentally in twenty different ways.

The dispute was keen, as is always the case on medical subjects; but the alarm was given, doubts began to be entertained, and, finally the opinion was abandoned." 417

From the preceding extracts our readers may judge of the valuable contents of the work now under review.

A TREATISE ON THE DISEASES AND INJURIES OF THE SPINAL NERVES. By *Joseph Swan, &c. &c.*

[Third and concluding Article.]

THE business of the critic can scarcely, perhaps, be dignified with the appellation of an art. His office in the intellectual world is analogous to that of the "maitre de cuisine," in the animal, and probably the hungry author will apply to both the same opprobrious adage, with reference to the origin of the viands and the cook.

The combinations of the latter have exercised the ingenuity and gratified the inclinations of every age, since the æra of Prometheus, the thief of fire. A mighty nation is justly proud of its incontestable pre-eminence in the direction of the kitchen, and the modern descendants of the warlike subjects of Clovis and Charlemagne, are less likely to be excelled in the *science* of gastronomy, than in that of war.

If the gratification of the palate is accounted the peculiar excellence of a great people, and if the professors of the pleasing art are appreciated and rewarded by the noble and the wise,* the occupation of the critic should be

* Louis Eustace Ude is said to rejoice in his box at the opera.

equally honoured and remunerated. But we fear that since the period when the Roman Knight established the dependence of the members on the belly, the latter has exercised an undisputed sovereignty. If a celebrated culinary physician were asked which he deemed the most glorious—the prescription of physic or preparation of food, we have little doubt that the palm would be awarded to the latter. Were a committee of Crockford's appointed to decide on the respective utility of Ude and of Gifford, the experienced better would probably wager on the triumph of the former.

We will not attempt to balance the merits of cookery and criticism, yet we must contend that as natural genius and assiduous study are universally admitted to be necessary to form the accomplished cook, some portion, at least, of reflection and experience are requisite to constitute the dexterous critic. The world would seem to disregard this reasonable postulate, and even Byron has believed that critics could be ready-made. The conductor of a Journal has frequent opportunities of lamenting the prevalence of this monstrous error. Correspondents amerce him in his pocket for amicable communications and obliging hints on the best way of managing his own affairs. His Majesty's post is the unexpensive medium of advice, which if taken, would have probably the effect intended—the reduction of the advised party to the pleasant situation described in the fable of the Man, his Son, and his Ass.

Did the critic cater for a single taste, a moderate experience might enable him to satisfy it. But when it is his office to replenish mouths of different dimensions, and to tickle palates of different susceptibilities, the man who gives only one dish and one sauce may possibly sometimes find them rejected.

We have offered these remarks in consequence of receiving some friendly communications on the best mode of editing this Journal. One gentleman has suggested a few very long articles, another has counselled a multitude of short ones. If these critical amateurs were confronted with each other, we should probably be amused by an interesting argument on taste. One excellent monitor has hinted that we indulge in scurrility and impiety. He dates his letter from the modern Athens, the native seat of toddy and religion.* Perhaps he was offended at our *blasphemous* denunciation of the midnight processions, and the pulpit alarums, for which Scotland was distinguished in the time of the cholera. To his injurious accusations we disdain reply. Whilst the sober Scotsman has been shocked at our scurrility, and would measure our step by the solemn gait of the tragic muse, a Southron well-wisher has lamented our sedateness, and deplored our want of spirit.

The ingenuous exposition of contradictory complaints, will usually convince the candid judge of their general injustice. The reader will perceive, that the Editor of an extensively circulated Journal is under the necessity of trusting to his own judgment, and of following the course which experience, or tact, induce him to believe most widely useful, and most generally approved. By such a standard he is actually tried, and he cannot be rewarded or amerced at the arbitrary tribunal of individual inclination.

* "Rum and true religion."—Byron.

This, which may be looked on as a species of apology, has appeared to us to be required on offering a *third* notice of the book before us. Nothing can be further from our wish or our intention, than the paltry attempt to spread a continuous article through successive numbers of this Review, for the purpose of provoking or sustaining curiosity. Such devices are too shallow, too contemptible to be entertained by any but the venal conductors of some penny trash. When the subject admits of natural divisions it is frequently convenient to adopt them. In the instance of the present work, the second notice formed a large component part of an article upon the nerves, which occupied 28 of our closely printed pages. Had the notice been completed in that article, it must either have been slurred and in all respects imperfect, or its bulk would have exceeded all reasonable limits.

It may not be thought impertinent if we make a few remarks on the subject of medical reviewing. Three classes of books are presented by the authors with equal confidence to the notice and approbation of the critic. The first is extremely good, the second is extremely bad, and the third is neither. No doubt can exist with respect to the treatment of the first class—the temper and tact of the reviewer will regulate his severity or forbearance towards the second—but the real difficulty is experienced in the management of the third. If too much space is allotted to a work of the latter description, the public is dissatisfied—if too little, the author and the author's friends are discontented.

Were the good works numerous, the reviewer's labour would be light—were the bad ones universal, his difficulties would be inconsiderable—the predominance of productions too good to be neglected, too indifferent to deserve the dedication of much attention, is that which perplexes the experienced critic, and ruins the incautious one.

Being in some degree Utilitarians, and thinking that the true objects of a medical review are the advantage and instruction of that portion of the profession, who are not possessed of the leisure for perusing or the means for purchasing those works which display and which contribute to the advance of science, we have always leaned to the side of analysis rather than of criticism. The former is more mechanical, more laborious, and more adapted to the purpose of diffusing information—the latter is more shewy, and less useful. We conceive that, in general, a lengthened abstract of one valuable work, is preferable to a meagre notice of a dozen. The latter is little superior to a catalogue—it provokes an appetite which it cannot satisfy, and insults the understanding by its impudent imitation of substantial aliment. Yet the paucity of original books of real value must compel the critic to abandon the hope of an exclusive plan; and the nature of the circumstances renders it advisable to combine the method of presenting a full account of good works, with the expedient of offering brief criticisms, or rapid sketches of inferior ones.

The medical public are perhaps not aware of the labour undergone by the conductors of an Analytical Review. A principal part is experienced, where probably it would scarcely be expected to exist, in finding matter adapted for their operations. Many a volume which is brought to their alembic, is composed of materials too coarse and too valueless to be analyzed, or too imponderable to be secured. The fatiguing process of examination is merely productive of disappointment and rejection. The Editors of this Journal

have laboured at least long, if they have not laboured well. They possess experience, and may claim the useful merit of industry. They have had little reason to complain of the public, and they trust that the public will find no just occasion to complain of them.

From this preliminary digression, we are recalled to the subject immediately before us. Five chapters of the work of Mr. Swan, consisting of more than one hundred and thirty pages await examination. The subjects of those chapters are—Diseased Appearances in the Spinal Canal—Injuries of the Spinal Chord—Diseases of the Nerves of the Senses—Diseases of the Sympathetic Nerve—and Tetanus.

DISEASED APPEARANCES IN THE SPINAL CHORD.

This chapter consists of the particulars of four cases. We fear that it can lay no claims to the possession of a complete or scientific arrangement, in fact that is no more than the expression of four insulated facts. The object with which they are brought forward is praiseworthy:—to add to the existing catalogue of authentic morbid appearances discovered in the vertebral canal. We shall briefly report the principal particulars..

CASE 1. *Hydrocephalus—thickening of the Spinal Arachnoid.*

A boy, eight months old, was seized with vomiting and fever, succeeded by opisthotonos, convulsive motions of all the muscles of the body, and insensibility, with dilated pupils. In a fortnight or three weeks after the commencement of the attack, the patient died.

On dissection, Mr. Swan found the fontanelle wider than it should have been, and a great quantity of fluid in the ventricles of the brain. On opening the spinal canal, three patches of a reddish substance, about the surface of a horse-bean, lay on the dura mater, about the beginning of the dorsal vertebræ, but he could not decide whether these were owing to disease. From the level of the first dorsal vertebra, the spinal arachnoid was thickened and opaque, and had coagulable lymph effused on it as far as the beginning of the cauda equina. The pia mater appeared to have been involved in the disease. The morbid appearances were confined to the posterior part of the chord.

We suppose that it is fair to consider the opisthotonos, if not the convulsions, as special symptoms produced by the condition of the spinal arachnoid.

Case 2. In a man, aged 25, who was hanged for murder, the spinal arachnoid had several patches of a cartilaginous substance on it. In each of the choroid plexuses was a yellowish tumour, about the size of a large pea. There was much fluid in the ventricles. The man had been confined in the gaol for many weeks, and during the whole time was in perfect health.

Mr. Swan observes, that similar appearances in cases of tetanus cannot fairly be considered as the causes of it. We imagine that little doubt can be entertained of the frequency of mistakes respecting morbid changes and appearances of the spinal marrow and its membranes.

CASE 3.—*Epilepsy—Cartilaginous State of the Spinal Dura Mater and Arachnoid.*

A man, aged 45, was admitted into the Lincoln County Hospital, on account of epileptic fits, under which he had laboured, at intervals, for seven years. He died in the hospital, from an attack of erysipelas.

On dissection, the longitudinal sinus was found to terminate in the left lateral sinus, and there was a communication between the two lateral sinuses very little larger than would admit the blunt end of a probe. The right lateral sinus appeared to be a continuation of the torcular Herophili. This arrangement must, apparently, have tended to retard the return of the blood. There was some fluid between the dura mater and arachnoid membrane of the brain, and the whole arachnoid covering the convolutions was very opaque and much thickened. Some small patches of cartilaginous matter were observed on it.

On the inner surface of the spinal dura mater was one small scale of cartilaginous matter. The arachnoid membrane adhered very much to the dura mater within the cervical vertebræ, and there were many adhesions through its whole extent, especially on the posterior part. There were several scales of cartilaginous matter on it, the same as in the preceding case.

CASE 4. *Reddish Substances on the outside of the Dura Mater.*

In the first of these cases, Mr. Swan alluded to some patches of a reddish substance, which lay on the outside of the dura mater. He has frequently observed similar appearances in different parts of the spinal canal, and more especially in the inferior portion. He cannot, therefore, at present, consider them the consequences of disease. In dissecting the body of a man whose lungs were very much diseased, he found such an appearance covering all the posterior part of the dura mater of the spinal canal, to a very unusual extent. There was a fluid very much like pus at several of the inferior spinal holes. On opening the dura mater, many adhesions were found between it and the arachnoid membrane, especially that part contained within the cervical vertebræ, some of these adhesions were long, like threads. Some bloody fluid was found in the inferior part of the sheath.

Such are the contents of the chapter on "diseased appearances of the spinal canal." It is evident that the title is too bold. It should have been worded, with more truth and more hesitation—on *some* of the diseased appearances in the canal.

We think we hinted in a former article that Mr. Swan is not happy in his theoretic ventures. The reader may be rather tempted to smile, than to be convinced, when Mr. Swan informs him, that he has known hiccup very troublesome in affections of the chest, and that he conceives it may depend upon disease communicated to the phrenic nerve.

The thirteenth chapter is devoted to injuries of the spinal chord.

ON INJURIES OF THE SPINAL CHORD.

This consists, like the former chapter, of narratives of cases, with the interposition of a few remarks, chiefly of a speculative character. It is a

subject of regret that Mr. Swan should display two material defects in the construction of this work—want of method in the arrangement, and proximity in the details. A little reflection might convince him, that the simple transfer of particulars, whether trivial or important, from the private case-book to the published volume, is an easy but an unsatisfactory mode of compilation. It requires little judgment, and still less genius to scrape together the notes of all the cases we have seen of a particular description, and denominate them a chapter, or section, or essay on the malady of which they are promiscuous specimens. We are advocates for the publication of cases, because we conceive that a philosophical work should approach as much as possible to the character of demonstration, and that opinions should be little more than the simple and obvious expression of facts. But a superficial knowledge of the laws of logic and of reasoning is sufficient to inform the medical writer, that irrelevant details and unimportant particulars, obscure what they do not illustrate, and fatigue rather than convince. To employ the language of the logician, the object of the exact and perspicuous writer should be to discover and enunciate the *essential mode* of the subject upon which he treats, and to strip it of those accidental attributes which encumber and conceal its essence. The expansive tendency of the facts of Mr. Swan is great, for one case is diffused through sixteen pages of his work.

We shall select those facts which appear to merit attention. The following appears to be an instance of concussion of the spinal marrow, or, at least, of an injury not amounting to much actual physical lesion.

Case. “A man, about thirty years of age, fell from a waggon on his back: he immediately had violent pain in his back, with convulsions of its muscles, attended with most excruciating pain; for a minute or two he would be comparatively easy, and then the convulsions would return with great violence. He was bled, took a large dose of laudanum, and a mixture with sulphate of magnesia dissolved in peppermint water, to which some ether was added: his back was frequently fomented and rubbed with anodyne liniment. The pain continued in this way violent for about twelve hours, and then gradually abated: at the end of twenty-four hours he had passed no urine, and as the bladder was very much distended, and he had much pain from it, his water was drawn off: he continued after this to expel his urine whenever he pleased: the pain kept gradually diminishing, and in about a week all symptoms of complaint, except general weakness, left him.” 225.

In the next case the injury was greater, and probably some alteration was produced in the organization of the medulla.

Case. A man, æt. 33, whilst on the ground, had his head forced violently forward. He immediately became insensible, and as it was supposed that his neck was dislocated, a man immediately held him fast between his knees, and having his hands fixed under the lower jaw, drew up the head forcibly, and the patient became instantly sensible. But all the parts below the neck were now discovered to be paralytic, the right side more completely than the left, sensation and motion being lost on the former, while imperfect sensibility was retained upon the latter. On the next day, he was seen by Mr. Barton, of Market Raisin, who found considerable tumefaction about the lowest cervical vertebra, pain in that situation, a paralytic state of the body, and fever. By venesection, and other antiphlogistic remedies,

he was relieved. Although no distortion of the spine could be detected, pain and increased numbness were occasioned by certain movements of the arms, and by deep lateral pressure on the vertebræ. It appeared to Mr. B. that there was a fracture connected with the right transverse process.

In January, 1820 (the accident had happened in the preceding September,) he was admitted into the County Hospital. He had the perfect feeling in every part of the body, except the extremities of the thumbs and fingers, which felt very numb; the muscles below the injury were as completely paralytic as they ever had been, but he could distinguish whatever touched him: he complained of a pain in his head, which had continued ever since the accident; he complained likewise of a very great pain in the right shoulder: there were some enlargement and tenderness on pressure about the last cervical vertebra: he appeared in good health as far as the functions of the viscera were concerned. Mr. Swan made a seton on each side of the affected vertebra. Soon after they began to discharge, he regained some power over the muscles. At the end of a month, he could just stand by himself, and walk, when steadied and supported by another. He had some use of the left arm, but very little of the right. We need not pursue the details. We need only state that he was discharged from the hospital in June, with such use of his lower extremities, as to be enabled to walk to a considerable distance. The use of his arms was also much improved, and he was entirely free from pain when they were moved. He was in perfect health. All enlargement and tenderness about the vertebra had disappeared.

This case will afford an opportunity for making a remark, with reference to the treatment of injuries of the spine. We think that the general occurrence of inflammatory action of the membranes or the substance of the spinal marrow, as a consequence of injury, has not been sufficiently attended to. The profession are anxiously alive to the supervention of inflammation of the brain, after blows upon the head—they endeavour to prevent it by precautionary depletion—watch every symptom, in order to arrive at a ready recognition of it—and, when it has occurred, they treat it with activity and boldness. Yet when similar injuries have been inflicted on the spine, the patient is frequently allowed to take his chance, with little assistance from the surgeon or physician. He is placed upon his back, his diet is restrained, and his bowels may be regulated, but, so far as our opportunities of observing and of reading have extended, the catalogue of remedies most commonly embraces few further, nor any more potent items.

Yet, if cases of this description are accurately studied, it will be found that the symptoms commonly characteristic of inflammatory action are usually established at an earlier or a later period, subsequent to the infliction of the injury. The pulse increases in frequency and force, the skin grows warm, the secretions are altered, pain may be felt in the seat of the injury, and the parts supplied by the nerves from the medulla opposite and below the affected part, display the conditions which vascular excitement of the medulla, or pressure on it from effusion, might be thought to be respectively likely to produce. It would be foreign to our purpose to pursue this subject at the present moment. We have merely thrown out the hint, which observant surgeons will discover, we believe, to be founded in truth. We have reason to hope that Mr. Brodie will communicate the results of his observation and

his experience on this subject to the public, at no distant period, and we are much mistaken if he does not present a more scientific and exact account of the symptoms, the consequences, and the treatment of injuries of the spinal column, than has yet been offered to the profession.

Mr. Swan's observations on this subject are so judicious, that we willingly extract them.

"There are three occurrences always to be feared after an injury of the spine, any one of which sooner or later is destructive of life, and therefore their prevention ought to occupy seriously the mind of every surgeon. The occurrences I allude to are inflammation spreading to the medulla or its membranes; disease of the bladder; and mortification of the lower part of the back and nates.

When the spine is injured, the same changes take place as in injuries of other parts of the body. Inflammation, in a greater or less degree, is set up, and if the injury is below the part that supplies nerves to organs immediately necessary for the maintenance of life, it is the inflammation, I believe, which causes death, when it happens very soon after the accident. It becomes, therefore, necessary to prevent inflammation of the chord and its membranes, by general and topical bleeding; indeed the same care ought to be taken as in injuries of the head. The diet should be of the mildest kind, and an absolute state of rest in a recumbent position should be enjoined. It is not enough for the symptoms immediately ensuing on the accident to be removed, but attention to diet ought for some time to be adhered to, and every exertion of the body avoided, and especially riding in a carriage over rough roads. Should pain arise in the injured part, blood should be taken from it by leeches or cupping; or should numbness or any other symptom denoting impaired functions of the chord be complained of, blood may be taken away in the same manner; and if the patient is not relieved, setons or issues should be made near the part. In mentioning setons and issues I would by no means recommend their being made immediately over a fractured vertebra, unless some weeks have elapsed since the accident, as issues especially may communicate with the fracture, and make it a compound one, thus causing irreparable injury.

The urine should be drawn off twice or three times in twenty-four hours; and if the bladder be insensible, so much greater ought to be the care taken in using the catheter, for an injury may be easily done; and when ulceration has begun in a part deprived of the influence of the brain, nature seems to have but little power in controlling it.

Mortification of the parts below the injury must be prevented by keeping them very clean and dry, and washing them with a spirituous embrocation, as brandy, &c." 251.

In some cases, small general bleedings are productive of advantage. Of course their employment must be regulated by the general condition of the patient, and the actual character of the symptoms. In a case of severe injury of the dorsal portion of the spine, which was admitted into St. George's Hospital, repeated bleedings, to the amount of four or five ounces at a time, were highly useful. The blood displayed the usual characters of inflammation, as the patient evinced its ordinary symptoms. He had perfect paralysis of all the parts below the seat of injury. He gradually recovered, and we met him about twelve months ago, walking without the aid of a stick in the street.

Mr. Swan appears to deprecate, rather than to approve, the proposal to trephine the spine in cases of fracture with depression. He plausibly, indeed fairly, urges the difficulty of determining the nature and amount of injury, and observes that, were this as easy as it is impracticable, the pro-

priety and safety of the operation would continue doubtful. The first argument is so weighty, that we fancy the operation will continue a subject of speculative reasoning, rather than one of practical application.

There are several omissions in Mr. Swan's notice of the effects of injury upon the spine. He has not alluded to, or has faintly glanced, at the alterations of the temperature of the body—the disturbance of the urinary secretions and organs—the variations in the sensibility and mobility of the parts below the seat of injury—the condition of priapism—and the structural changes which occur in the medulla. These are severally matters of interest and of importance to the scientific and the practical surgeon.

DISEASES OF THE NERVES OF THE SENSES.

These form the contents of the fourteenth chapter. Mr. Swan first considers disease of the olfactory nerves; but we perceive little in his observations to detain us. The only remark to which we think it necessary to allude, is in reference to the perception of unpleasant odours, when no apparent external cause for them exists: and no obvious alterations of the nerves, of the apparatus of smell, or, indeed, of any part of the body whatever, is present to account for them. He compares this unnatural condition of smell, to what is observed when morbid impressions are made on the optic nerve, spots of various colours and shapes being seen, as though they had a real and substantive existence. When this "morbid action" (the term may be exceptionable) of the nerves of smell is set up, the functions of the stomach and viscera connected with them are, as Mr. Swan assures us, frequently deranged, and if these are restored to a healthy state, the disorder will generally cease.

From diseases of the olfactory, Mr. Swan proceeds to those of the optic nerves. He subjoins some description of amaurosis, which we may omit. But he offers some observations, dictated by experience, on the treatment of "dizziness."

"When it comes on frequently, I have found it very difficult to cure by the means usually employed for that purpose. As I have in several obstinate cases removed it, I think it may not be useless to relate what has occurred to me on the subject.

When a person has become subject to dizziness, though he may in the first instance have been relieved by bleeding, yet should the complaint soon return, and especially if the body is much debilitated, a farther loss of blood will not only not relieve it, but will, on the contrary increase it. In many cases the usual remedies may be employed with advantage; but there are others in which the complaint is continued from habit, which must be interrupted by every thing that can improve the general health; and, with this view, I have several times given, with success, from half a drachm to a drachm of powdered bark every four hours; at the same time allowing a generous diet, with the use of wine. I have often thought malt liquor prejudicial.

Instead of dizziness, or accompanied by it, some people will have a very confused sensation in the head, attended with debility of body, restlessness, palpitations of the heart, and mental irritation, almost amounting to insanity; which I have known to be cured by the same means." 260.

Of course, dizziness is a symptom of several conditions of the cerebral or other systems. The inexperienced surgeon or physician must not rashly

follow Mr. Swan's advice. Proper care must be exercised in discriminating cases.

When children, says our author, are affected with a disordered state of the digestive organs, or worms, squinting is frequently produced, in consequence of the impaired action of the abductor muscle, through an affection of its nerve produced by its communication with the sympathetic.

We will not follow Mr. Swan through his devious pursuit of the functions of the lenticular ganglion. His reasoning is ingenious, and his suppositions may be just.

In treating of diseases of the gustatory nerves, Mr. Swan observes, and he quotes a case in point from Sir Everard Home, that these nerves are sometimes violently bruised between the teeth, and that loss of the sense of taste has been the consequence. In a woman who was bitten on the tip of the tongue by a wasp, the part became swollen and very painful, and she lost the gustatory sense for a week. Mr. Swan also alludes to the well-known circumstance, that taste is rendered imperfect, by obstruction to the passage of air through the nostrils. But we cannot admit his explanation to be a happy one. He supposes that the absence of taste is produced by the air, which should pass through the nose, being carried between the tongue and the palate, and keeping those parts too much asunder. A simple experiment may convince any one that this is not a necessary consequence of obstruction of the nasal passage, and a more philosophical rationale of the circumstance may be found, in the consideration of the compound nature of taste. It is proved that this consists of the impression produced by sapid substances on the tongue, and, perhaps, upon the palate; and of the odour of the substance, or some sensible quality, appreciated in the nares. The obstruction of the passage of air through the latter prevents the development of this species of sense, and impairs, in that ratio, the general function of taste.

Mr. Swan occupies twenty-two pages with diseases of the auditory nerves, or rather with some observations upon deafness. These are not arranged with sufficient precision to enable us to lay their substance before our readers, in the space which the pressure of other articles permits to dedicate to this. Yet we will endeavour to select the most novel or peculiar.

He first relates a case in which, after an injury of the head, and the flow of much blood from the right ear, accompanied with insensibility, permanent deafness of that ear ensued. He supposes that the auditory nerve was greatly injured or destroyed.

The characters of nervous deafness next occupy his attention.

"The functions of the auditory nerves may be impaired so as to produce deafness. When this is the case, the patient finds he cannot hear sounds that he was accustomed to, and is at the same time tormented with various noises, which are compared to the undulations of the sounds of bells, humming of bees, waterfalls, &c, and if the complaint increases, he becomes so deaf as not to hear at all without the greatest difficulty."

"The noises attending nervous deafness, likewise attend diseases of the external auditory meatus, as when it is filled with hardened cerumen, and likewise when there is a diseased state of the membrane lining the meatus. When there are noises with a loss of the sense, and the external auditory meatus and the membrane of the tympanum have every appearance of being in a healthy state, if the patient stops his nose and mouth and blows downwards, and feels that

peculiar sensation which every one does when the Eustachian tubes are perfect, and if a watch cannot be heard except very faintly, when it is in contact with the head, face, neck, or teeth, we may be certain that the disease is in the nerve." 269.

We fear we know too little of the real functions of the different component parts of the auditory apparatus, to enable us to acquiesce, without misgivings, in the foregoing positive annunciation. We conceive that, when the argument is fairly weighed, its value amounts to little more than this, that in the cases described by Mr. Swan, the external meatus and the membrane of the tympanum are probably not concerned in the production of the deafness, and that it is certainly not dependent on obstruction of the Eustachian tube. Beyond this, we see no certainty nor safety.

The treatment recommended by Mr. Swan, in cases of this nature, consists of mercurial purgation, with antiphlogistic regimen, and the application of blisters behind the ears. The patient should be bled, when symptoms of fullness of the cranial circulation are present.

Mr. Swan has some ideas, or rather some suspicions, on the action of the branches of the glosso-pharyngeal nerve, distributed upon the tympanum, which, although more fanciful than likely to produce conviction, may not be unworthy of the notice of the scientific reader.

"In tracing the tympanine branch of the glosso-pharyngeal nerve, which has been so particularly described by Jacobson, much of its distribution may be seen on the transparent membrane lining the tympanum when this part is perfectly sound, but when it is diseased a very considerable difficulty is experienced. In an attempt to trace this nerve in the head of an old woman, the membrane lining the tympanum was not only thickened, but there was at the same time some roughness of the bone. In the head of a man, who had a suppurating node on the forehead, and whose posterior nostrils were stopped up by adhesions of the soft palate, this membrane was also thickened; the sphenopalatine ganglion was very considerably enlarged. In the dissection of the head of a very young woman, the Schneiderian membrane, covering the inferior turbinated bone of the left nostril, adhered very considerably to that of the septum, so that a very little passage was left for the air; there was a perforation in the membrane of the tympanum of the same side, and purulent matter was contained in each tympanum. The membrane lining the tympanum was so much thickened, that the nerves could not be observed.

I believe deafness does not so often depend on a disease of the auditory nerve as has been supposed, but much more frequently on an inflammatory action attacking the membrane lining the tympanum, and involving these small branches of the tympanine nerve. There are very few deaf people who cannot hear music or singing, or who cannot hear conversation, whilst they are in a carriage in motion. But it is not so with those who are nearly blind, for when the optic nerve is paralysed, no light, or any modification of it, can produce perfect sight, and it must be the same with the auditory nerves with respect to sound. I will not deny that a very strong light may enable a person who has a slight degree of vision to see some objects almost in the same manner as a very deaf person hears with a speaking trumpet. I believe, therefore, that deafness depends very frequently on the inflammatory action which has impaired these minute branches of the glosso-pharyngeal nerve, distributed on the tympanum; and although many of the noises may depend on the disordered functions of the auditory nerve, I nevertheless think they may arise, too, from these small branches of the glosso-pharyngeal, and their communication with the sympathetic in the carotic canal." 271.

A less ingenious man than Mr. Swan might regard the chronic inflammatory thickening of the tympanum as sufficient, *per se*, to account for the phenomena, independent of any particular alteration of a branch, so small as to be almost imperceptible, of a nerve whose office continues problematical. The microscopic eye of the physiological anatomist observes, with attention, objects that escape the vague glance of common men.

Mr. Swan alludes to the occurrence of deafness in consequence of exposure to very loud sounds, when the ear is unprepared to receive them. He relates the case of a Captain Norton. We conjecture, from the circumstances, that the Captain had been exposed to the sound of artillery, in some of those actions which seldom redound to aught but the honour of our gallant sailors. We will let our hero tell his own story in his own way.

"In reply to Mr. Swan's questions, Captain Norton begs to state, that blood only came from the left ear, being in a right line towards the percussion; yet the singing or intense buzzing was equal in both ears—sometimes like the chirping of ten thousand sparrows, and at others a monstrous hissing. The first day Captain Norton could not hear any thing, and the second day could only hear a person who placed his mouth close to the ear, and spoke in a modulated tone; could not hear the high notes of a fife; could not distinguish the tune; he could not hear the boatswain's call (whistle).

Some four or five weeks afterwards Captain Norton was again in action, and was close to the muzzle of a gun when fired, and the report most completely restored his hearing for two days, when the singing again commenced. Captain Norton is of opinion that his hearing is as acute as ever, and it is only the singing which confuses sounds; for when one person only is speaking, he can hear him tolerably well; but when three or four are speaking at the same time, he cannot distinguish any one: he can hear a distant gun or bell as well as any one." 274.

Mr. Swan imagines, what, indeed, is more than probable, that in this and similar instances, the membrane of the tympanum is ruptured. He supposes that, where particular sounds can be heard, but words cannot be sufficiently distinguished, in a conversation carried on by several persons, (occurrences sufficiently common in deafness,) the reason may probably be found in the membrane of the tympanum and that of the round fenestra not acting in unison. We leave this supposition for the assent or investigation of our readers. We may state, however, that Mr. Swan is laudably actuated by the desire to encourage the patient and practitioner with the hope, that deafness may depend more frequently on affections of the tympanum, a part within our reach, than on distant and inaccessible conditions of the auditory nerve. He thinks it probable, that many of those affections have their origin in inflammatory affections of the tympanum, and that numerous instances of deafness would be prevented, were the surgeon more judicious and more active in treating the ear-achs and similar complaints of early life.

Mr. Swan brings forward some curious facts, in order to establish a singular hypothesis:—That the portio dura of the seventh pair of nerves contributes to the sense of hearing. Let our readers listen to Mr. Swan's argument.

"When the ears are stopped, and a watch is brought in contact with any part of the head, face, teeth, or neck; or if a stick, water, &c. be interposed between

any of these parts and the watch, the sound will be heard as well as when the ears are open.

It has been supposed that the sound is mechanically conveyed through the flesh and bone in the same way it is through a macerated bone, piece of wood, &c.; but if it were so, it must be heard always when the auditory nerve is perfect, at whatever part of the head, face, &c. the watch is applied, but this is not the case. When the hearing through the external meatus has been perfect, and there has been no apparent alteration in the structure of the head, face, &c., I have seen many who could hear from only one of these parts, and several who could not hear from any of them.

"If I stop my ears and rest my chin on the petrous portion of the temporal bone in a macerated skull, and place my watch in contact with any part of the skull, I can hear the sound perfectly. I saw a boy who was born deaf and dumb, but had been taught to speak, and when a watch touched the left side of his face he could hear it, but when it touched any part of the right side he could not in the least.

A man who was recovering from an illness had become so deaf of the left ear that he could just hear my watch when put very near it; he heard perfectly of the right ear. I desired he would stop his ears until he could not hear my watch when put nearly in contact with them; I then let it touch the left side of the face, &c.; he just heard it, but when I let it touch the right side, he heard it distinctly.

If sound is conveyed mechanically through the flesh and bone, what in these two cases should hinder it from being heard distinctly, when the watch touched either side of the face, any more than in the macerated skull?

If sound is not conveyed mechanically through the head, face, &c., it must be through some other medium, and that I believe to be the facial nerve of the seventh pair and some other nerves connected with it.

On dissecting the seventh pair of nerves in man, I find at the bottom of the internal auditory meatus a communication between the auditory and facial nerves.

In sheep I have observed the same communication.

In fishes several nerves, that have a communication with the auditory nerve, are spread on the skin over the whole head.

If we consider how the facial nerve is connected by nervous substance with the auditory, its extraordinary course, its receiving the branch of the vidian nerve and the chord of the tympanum, and, when it has got out of the stylo-mastoid foramen, its great expansion, I think we may conclude that it was made to serve some greater purpose than has hitherto been ascribed to it." 281.

The idea is ingenious, but we do not completely understand its applicability to the facts. Why should a boy, born deaf and dumb, hear the ticking of a watch placed in contact with the left side of his face, and remain insensible to the same sound, when any part of the right side of the face was touched? Was the portio-dura on the latter side paralyzed? Probably Mr. Swan could dispel the doubts that cling to the sceptical mind of the critic. Our author, indeed, pursues the supposition through several pages, and through a lengthened series of experiments performed on an individual born deaf and dumb. Whilst we beg to refer the inquisitive reader to the work of Mr. Swan, we must take the liberty of hinting our belief that he has not perfectly made out his case. Yet we cannot enter the arena of argument, and perhaps it is not just to assume the rights of victory, when prudence or necessity compel us to decline the fight.

ON DISEASES OF THE SYMPATHETIC NERVE.

The experienced reviewer has witnessed the decline and fall of numerous attempts to determine and distinguish the diseases of the sympathetic nerve. The genius of Bichât almost grasped its physiology, yet the doubt which is gathering, rather than subsiding, on this interesting question, may shew how inadequate are the efforts of even a master's mind, to decide by reasoning, subjects that can be proved only by direct demonstration and induction.

Mr. Swan commences by shewing that Bichât did not hold such exclusive opinions as have been supposed, on the want of sensibility in the sympathetic nerve. It requires, indeed, but a moment's reflection to shew the apparent incompatibility of such a notion, with the various sensations experienced in health and in disease, in the parts to which the sympathetic is distributed. Yet in estimating the functions of this nerve, or rather system, the reasoner and the experimenter are met by an obvious and a startling difficulty. The nerve in question is so connected and involved with the cerebral and spinal nerves, that it seems impossible to decide on the respective parts which they play in the production of phenomena.

Mr. Swan relates a case in which the temporal bone was destroyed, and was removed by the process of exfoliation. The sympathetic nerve on that side was ulcerated, but so many other nerves were affected, and such various mischief was produced, that we cannot conceive the case to prove much in a physiological sense.

Mr. Swan relates the particulars of two experiments, performed with the view of determining the functions of the sympathetic. In the first experiment, a portion of the nerve was cut out on each side of the neck of a rabbit. No particular effect was produced. On killing the animal, three months afterwards, the extremities of the nerves were found to be united by new filaments. The second experiment was similar to the former, and so was the result. What they prove must be deemed of a negative quality.

Mr. Swan conducted some other experiments, for the purpose of ascertaining the manner in which inflammation of a part of the body produces constitutional irritation and fever. We will offer an abstract of an experiment of this description.

"At a quarter before 10, a.m., of Jan. 11, 1825, a piece of gamboge weighing 76 grains, was inserted in a wound between the shoulders in the back of a very large dog. He soon after began to be very uneasy. In the evening he lapped much water, and afterwards vomited. He purged in the night.

12th, at seven, a.m. He lies as if he were almost dead. He sometimes moves and howls, and then appears in a state of stupor. He cannot stand. At half-past nine he was in the same state. Whilst I was observing him, there was a violent spasm of all the muscles of the body, which lasted about a minute; he vomited at the same time. He died about eleven." 300.

The dog was examined at one, p.m.

All the ganglia of the sympathetic nerves were very highly inflamed.

The pia mater of the brain was rather more vascular than natural. There was a small quantity of serous fluid about the base of the brain. There was a very small quantity of serous fluid in the sheath formed by the spinal dura mater. The axillary nerves and the nervus vagus were more vascular than usual.

The liver and spleen displayed an increased vascularity. The stomach contained some half-digested food which had been eaten before the experiment was made. Its villous coat near the pylorus was very red; in the other parts there were numerous black spots, at each of which there was an ulcer, and the black part appeared to be coagulated blood. The villous coat of the small intestines had a very high degree of redness, and was ulcerated in many places. The mucous coat of the large intestines was more red than usual.

The wound in the back was closed; when its lips were separated, a quantity of gamboge, dissolved in the serum, flowed out, but some of it had insinuated itself amongst the cellular membrane, nearly as far as the elbow. There was a most violent and extensive inflammation of the cellular membrane, and a corresponding effusion of serum.

It will be noticed that we have Mr. Swan's authority for stating, that all the ganglia of the sympathetic nerves were highly inflamed. It is true that Mr. Swan does not enter into satisfactory particulars, nor inform us what appearances constituted inflammation. Yet Mr. Swan would seem to be satisfied, not only of the reality of the inflammatory state in this instance, but even of its general occurrence, in cases where constitutional irritation follows as a consequence of partial inflammation. He says:—

“After every accident in which the constitution sympathises with the injured part, I believe, the ganglia of the sympathetic nerves become irritated, and the functions of the parts supplied by their branches are disturbed in consequence. The action of the heart is increased in proportion to this degree of irritation in them, so long as it continues moderate.” 304.

This general enunciation of opinion and of facts may spare us the necessity of special allusion to our author's cases. We may introduce another observation:—that, in consumption, and complaints attended by hectic fever, Mr. Swan has not found as increased vascularity of the ganglion of the sympathetic nerves; but that, should acute inflammation supervene, the symptoms change, and an increased action in the ganglia is the consequence. We will not pursue the subject of vascularity of the ganglia any further. It may fairly be presumed that Mr. Swan, acquainted as he is with the anatomy and the pathology of the nervous system, would not heedlessly mistake a casual or an insignificant appearance for a morbid change of decided character and important nature. His observations are therefore entitled to the attention of those who are inclined and enabled to follow up the investigation. We may add Mr. Swan's reasons for concluding that the appearance he describes is really inflammatory.

“Although I am well convinced, from numerous dissections, that the ganglia of the sympathetic nerves have a great vascularity, induced only by several medicines and diseases, yet some are inclined to think that this appearance is present in a state of health. In answer to this opinion, I beg to observe, that I examined an executed subject immediately after it was cut down, and found the ganglia of a pearly appearance, and free from any mark of vessels carrying red blood. I have found one ganglion very red from a number of vessels filled with blood, and the corresponding one nearly white; and I have so often observed this difference, and in such a marked degree in the same subject, as to leave no more doubt in my mind of its being the effect of inflammation, or something bordering on that state, than of similar appearances constituting the in-

flamed conjunctiva of one eye, and the uninflamed state of the other. If a judgment be formed from the appearances presented by an injected subject, it will be erroneous, for it is always impossible to speak decidedly of the natural degree of vascularity of any part which has undergone such a preparation. The ganglia may be made red by injection, and so may the conjunctiva of the eye; we may therefore fairly conclude, that if the injection fills numerous vessels of the eye, which could not be observed during life, that this appearance is equally foreign to the ganglia during health." 322.

The question may be asked—why such various symptoms should exist during life, when inflammation of the sympathetic ganglia is discovered after death? This reasonable query receives no satisfactory reply from Mr. Swan. Contenting himself, for the reasons he has stated, with believing that the appearances mentioned are inflammatory, he abandons the attempt at solving the difficulties which surround the production of symptoms. We cannot quit the subject without the observation, that, obscure as the pathology of the sympathetic is, we think that it is worthy of more minute attention than it seems to have hitherto received.

The last chapter of this work is occupied with the perplexing subject of Tetanus.

ON TETANUS.

The researches of our author on the morbid changes which invade the sympathetic nerve, appear to have enabled him to triumph, in some degree, over the obscurity that shrouds from the common ken, the pathology of tetanus. The obstinate sceptic may hint that the dubious and hypothetical foundation is unable to support any stable edifice. Let the candid reader attend to Mr. Swan.

"With a view of removing as much as possible this obscurity, I have been induced to inquire how the body is usually affected after accidents. From that inquiry I have been led to state, that when a severe injury has been received, the ganglia of the sympathetic nerves become irritated, and consequently the parts to which they distribute nerves. When the constitution is healthy, I believe the irritation of the ganglia goes off in a few days, and then the parts supplied by them return to a state of quietude and again perform their healthy functions.

When the ganglia of the sympathetic nerves have been thus affected, and the irritation has subsided, an unhealthy action in the wound may excite a fresh irritation in them. Or even if the wound be healed, the passions, improper food, and other causes, may continue, reproduce, or increase the disordered state of the organs receiving nerves from the ganglia, and thereby excite a fresh irritation in them.

When the ganglia of the sympathetic nerves have once been in a state of irritation, I believe they are very susceptible of its renewal. When they have become again irritated, it may be readily conceived that the irritation, modified by the confinement during the healing of the wound, or by some disordered viscus, may be very different, and by this change made much more formidable in its consequences; and it may therefore be readily conceived, how in this state it may be communicated to many of the cerebral and all the spinal nerves, and from these to the spinal chord; thus producing tetanic spasms, varying according to the part of the sympathetic nerve most affected, as well as the extent and complexity of the irritation." 326.

We fear there is some ground for doubt and disbelief in the foregoing explanation of cause and consequence. The potential mood is liberally

used in describing the possible affections of the ganglia, and important circumstances are *believed* and *conceived*, when the rigorous reasoner might expect them to be proved.

Mr. Swan relates four cases and one experiment in order to display the affection of the sympathetic ganglia in tetanic cases. In the instance of the experiment tetanus was produced, and a rabbit was destroyed by the alcoholic extract of *nux vomica*. On examining the animal after death, all the ganglia of the sympathetic nerves, and especially those of the right side, had a considerable redness. The lumbar ganglia were less red than any of the rest. The par vagum was unusually vascular. The axillary plexus, especially of the right side, was rather more vascular than usual, and the same was observed respecting the sciatic nerves. The pia mater of the brain and spinal chord was very vascular; so were the absorbent glands, and the villous coat of the stomach. The lungs were very purple, and there was an increase of vascularity on the outside of the aorta.

The particulars of one case will afford an idea of the morbid appearances on which Mr. Swan has founded his opinions.

Case. The patient died on the sixth day from the commencement of the tetanus. He had been treated by turpentine and calomel and opium.

On examination after death, the spinal sheath was found to contain a small quantity of limpid fluid. Many adhesions were found between the loose arachnoid membrane and that lining the dura mater. On the loose arachnoid membrane there were a few small spots of cartilaginous matter. The veins of the pia mater were much loaded with blood. The spinal chord was divided in many places, and appeared perfectly healthy; but in the beginning of the dorsal portion there was a spot of coagulated blood, of the size of a small pin's head, in the midst of the medullary substance. There was an effusion of bloody serum between the arachnoid membrane and the pia mater of the brain, at the situation of the squamous portion of each temporal bone. The veins were turgid, but there was not any diseased appearance in the brain.

The visceral alterations were not numerous nor important. They consisted of congestion of the lungs—a patch of coagulable lymph upon the heart—vascularity of the mucous membrane of the stomach and the bladder. Blood was effused into the substance of each psoas muscle.

The par vagum in the neck was quite healthy, but at the root of the right lung the nerve had an increased vascularity, which did not exist in that of the opposite side.

There was an enlargement and a greatly increased vascularity of all the ganglia of the sympathetic nerves in the chest, and also of the semilunar ganglia; in several of those in the abdomen, the same appearance existed, only in a less degree, but in some there was neither the least redness nor enlargement.

As a summary of Mr. Swan's opinions, we may state that, although he does not intend to assert that tetanus is a specific complaint, entirely seated in the ganglia of the sympathetic; he conceives that those ganglia are the important parts of the nervous system, to which the first irritation tends, and from which it proceeds to the remainder of that system.

Mr. Swan relates some cases in which tetanus was evidently the conse-

quence of injury of a nerve. We will rapidly enumerate their chief particulars.

1. A patient was operated on in the old manner for popliteal aneurism, by Sir William Blizard. The aneurismal sac sloughed out, and the healing process was advancing, when Sir William endeavoured to extend the limb from the flexed position in which it had remained since the performance of the operation. The patient suddenly expressed agonizing pain, and within a few hours was seized with tetanus, of which she died. On dissection, the cutaneous nerve, which accompanies the lesser saphena vein, appeared to have been divided in the operation, and the inferior portion having become attached to the contiguous parts, had been stretched in the attempt to extend the limb. Such was the explanation of the occurrence of the pain and succeeding tetanus, which appeared most consistent with the facts.

2. In a case of tetanus which occurred to Dr. Hennen, the radial nerve was somewhat thickened, and a splinter of bone was sticking in it.

3. A case is mentioned by Dupuytren, in which a patient died from tetanus, after a small wound in the forearm, occasioned by a blow from a coach-whip. On examining the cicatrix, M. Dupuytren was greatly astonished to find a portion of the whip enveloped in the very substance of the cubital nerve.

3. Larrey relates three cases where it was produced by an injury of the larger nerves. In the first, the anterior crural and sciatic nerves had been injured by a ball; in the second, the median nerve had been tied with the brachial artery; and in the third, the nerves had been tied in amputation of the leg.

4. Mr. Swan possesses the thumb of a man in which there was a partial division of one of the dorsal branches of the radial nerve, the semilunar ganglia were also highly vascular.

5. To these cases related by our author we may add two others which occurred at St. George's Hospital. The first was that of a man who was stuck with a pitchfork, in the outside of the leg. He died of tetanus. On examination of the limb, it was found that the pitchfork had wounded the peroneal nerve, and that a sort of nodule, the result of inflammatory action and thickening, was developed in its substance. The second case was that of a boy, who slightly wounded the sole of his foot, in climbing over some iron railings. He died of tetanus. The spike was found to have injured the internal plantar nerve, which displayed such a thickening as that described in the preceding instance.

It is possible that, in other cases, a superficial examination of the injured part may have failed to observe the implication of the larger nerves or their branches; it is probable that in many instances, the smaller twigs may be more or less involved in the cicatrix.

The frequent failure of amputation of the wounded part has destroyed the confidence of surgeons in the measure. Yet cases have been published, in which it would seem to have produced a cure. Division of a nerve succeeded in a case detailed by Dr. Murray, in the Medical Gazette for February, 1833. The wound was in the sole of the foot, and had been inflicted by a rusty nail. The posterior tibial nerve was divided, and the patient recovered.

Larrey relates two cases, in which incisions were beneficial. They are practically interesting.

"The first was that of a man who was struck by a ball, which crossed the right arm, and wounded the biceps and coraco-brachial muscles, and the radial and internal cutaneous nerves. On the eighth day he began to have great pain; and it was wished to divide a bridge left by the wound, in which were found some branches of the internal cutaneous nerve, but the patient refused to have it done. The next day his local pains were very acute; he had convulsive motions of the hand and fore-arm, heat in the whole system, and locked jaw; he was very restless, and in continual agitation. The rapid progress of the symptoms determined Larrey to divide the bridge, and cut the bottom of the wound, where he found several nervous bridles. This operation was very painful; but two hours afterwards the patient was much relieved, and in the space of two days all the symptoms disappeared.

"The second was that of a man who received an injury from a spear on the right side of the forehead. The point of the spear had slid obliquely from below upwards and inwards under the pericranium, so as to make a deep fissure in the frontal bone: one of the superciliary nerves was grazed by the cutting side of the spear. Nine days passed without any alarming symptoms, and it was considered as a simple wound; but in the night between the ninth and tenth days tetanus came on, with convulsive motions of the corresponding eye-lids, and a loss of sight in that eye: there was a little mental wandering, a very acute pain, locked jaw, and a very marked disposition to emprosthenos. Emollients were immediately applied to the wound, and diaphoretic and opiate draughts were given without effect; the complaints went on increasing, and in twenty-four hours would have been at their greatest height. The wound was then examined with a probe, which gave very acute pain; this determined Larrey to divide from below upwards with a bistoury the whole of the superciliary muscle, the nerves, and vessels: the patient was immediately relieved, and in less than twenty-four hours all the tetanic symptoms had disappeared." 345.

Mr. Swan hints his method of treatment with diffident suspicion. He advises general and local blood-letting—calomel with purgatives to restore the secretions—and such medicines as Dover's powder afterwards. It is much to be lamented that, however plausible such remedies may seem, experience, the rigid judge of their real value, has already tried, and found them wanting.

Here, then, we part from Mr. Swan. We think he is deficient in the useful, indeed the necessary, qualities of method and of condensation. We trust that the next edition will appear with emendations, corrections, and reductions. It contains many valuable, and some unimportant facts—some ingenious, and some rather trivial reasoning. We have endeavoured to select the better portions, and have avoided, as much as possible, the occasion for criticism. Again, we would recommend Mr. Swan to follow old Selden's advice, and employ his time in making his book shorter.

A TREATISE ON THE CIRCULATION OF THE BLOOD. By J. F. Handley. Chipping Norton. Octavo, pp. 33. 1834.

WE have neither much space nor patience to devote to a review of this strange production, although every page might afford room for ill-natured criticism to the philologist, as well as to the physiologist. Here is a sample of the whole—a brick, which may be taken as a specimen of the building. At page 14, the reader is informed—

“I do not hesitate, therefore, to say, that atmospheric air is necessary to be received into the lungs, not to stimulate the fibres of the heart and bloodvessels, but to re-establish the currency of the fluid, after it has become effete by passing through the different channels of the body; that the force with which it circulates is regained at the commencement of the pulmonary veins, and completely exhausted at the termination of the pulmonary arteries; and that the effect derived from the mixture of atmospheric air with the blood is not to give it stimulus, but to bend with it an elastic and expansive force, by which means it obtains its moving impulse; but in what manner I shall attempt hereafter to explain.” 15.

It would seem, from the tenor of this sentence, as well as from some remarks further on, that the blood, during its pulmonary circulation, becomes completely saturated, to the maximum point, with air, which is absorbed, in our author's opinion, in immense quantities, and imparts a high elastic resistance to the arterial mass; and that, in short, it is in the state of a powerfully-condensed or compressed vapour or gas, ready to dilate itself whenever the pressure is removed. At page 22, the announcement is made—

“That every particle of blood in the whole body, by repeated exposures, becomes impregnated with atmospheric air, inasmuch as it maintains an affinity for it; and that according to the diminution of the number of the vessels which contain it, so will be the increase of its velocity, that is to say, its force will be concentrated by accumulation; for if the elastic force of the fluid contained in each vessel of the rete mirabile, supposing that there are 1000 vessels, be as one, then the same force as it flows through the pulmonary veins, being reduced to four in number, will be 250 times greater than in each vessel of the rete mirabile; and when it arrives at the left auricle of the heart, being there contained in one vessel, its force will be a thousand times greater: and hence it will appear how absolutely necessary it is that the left auricle and ventricle of the heart (but particularly the ventricle for that alone receives the force of its entire accumulation) should be well fortified against such an impetuous rush of the fluid into their cavities. It is on this account that the strong muscular fibres of the heart are given, that is to resist, and by their resilience, throw back the force of the fluid upon itself, so as to propel it forward till it gradually loses its force in distribution; and thus according to this theory, the greatest velocity of the blood will be in the left auricle and ventricle of the heart—the least in the termination of the arteries.” 22.

Then follows the explanation of the circulation in the veins. The key to the explanation is in the following sentence.

“Every solid substance or liquid portion of matter will gravitate to a fixed point is a well-known fact; therefore we will suppose the whole body to be perpetually gravitating towards its centre, that is, every superficial part of it is

pressing in that direction; now allowing this to be the case, as indeed it is, the lighter parts will give place to the heavier, so that the blood which flows through the vessels of the skin will actually receive its weight. Now as the skin and different organs of the body are specifically heavier than the blood itself, it must necessarily follow, that the blood will be pressed by them in a direction contrary to that in which the force of such pressure is applied to it, so that it must either flow forwards in the veins, or backwards into the arteries again." 23.

This is a most unlooked-for application of the doctrine of centripetal forces to the science of physiology; and the precision of anatomical facts is made subservient, by our author's plastic mind, to the confirmation of his peculiar views. As the thickness and strength of the left ventricle and auricle of the heart are supposed to be indicative of the very powerful expansive or elastic force of the aerated blood, so it is ingeniously imagined by our fanciful author, that the right side cavities are of considerable thickness and strength, for the purpose of being fortified against the force of the gravitating venous blood. But enough of these reveries.

Some of the words and phrases of Mr. Handley deserve a new dictionary on their own account—for example, "sarcous substance," "currency of the blood," "the fibres retort the fluid," "refellent," "energizes," &c. Alas! for the *cacoethes scribendi*!

A TREATISE ON THE DISEASES OF THE SKIN. By *P. Rayer*, D.M.P. Translated from the French, by *W. B. Dickinson*, Octavo, pp. 398. London, 1833.

THE nosology of cutaneous affections has been one of the most puzzling problems in medical science; and perhaps there is no set of diseases, of which the classification is so far from being determinate and satisfactory, even at the present day. It would not be necessary to allude to the thousand and one errors which were partly caused, and partly increased, by the adoption of a vague and most unscientific nomenclature, were it not that our Continental brethren have almost uniformly, until the appearance of Rayer's admirable work, retained some of its most annoying absurdities; witness the manifold and incongruous meanings of those words, "teigne" and "dartre," not only in the writings of Alibert, but also in those of most of the best French authors. We are told that it "was common to designate under the former name all chronic inflammation of the hairy scalp, and, under the latter, all chronic inflammations, and some acute diseases, of the face, the trunk, and the limbs." Not to speak of the absurdity of giving different names to the same disease, according to the part of the body where it appears (as well might a botanist make different species of a plant from its being found on walls, or in meadows, or in woods), let us glance at the subdivisions of the generic "dartre;" Alibert enumerates seven species, viz. the crustaceous, erythemoid, furfuraceous, phlyctenoid, pustular, corroding, and the squamous—such a confused hotch-potch of contrary things! By far the most rational attempt at the classification of skin diseases, previous

to the publication of Willan's immortal work (which we are ready to confess was indebted, in some respects, to its predecessor), was Plenck's "Doctrina de Morbis Cutaneis," printed in 1796: he formed 14 classes—maculæ, pustulæ, vesiculæ, bullæ, papulæ, crustæ, squamæ, callositates, excrescentiæ, ulcera, vulnera, insecta cutanea, morbi unguium, morbi capillorum. Willan very properly struck out several of these divisions, and reduced them to eight: and so satisfied has the profession been with the superiority of the arrangement proposed by him, that, with but a few exceptions, it has been universally adopted, and with great propriety; for the main errors which it is possible to charge against it, seem almost inseparable from the nature of the subject; many of the diseases being of so Proteiform a character, that they defy any simple and exclusive arrangement in a nosological catalogue. The correctness of this remark seems amply warranted, by the very results of the attempts made by Rayer and others, to amend what was deemed faulty or defective in Willan's system. We agree with them in some of their objections to particular parts of it; purpura hæmorrhagica ought not, perhaps, to be associated with measles among the exanthemata—pemphigus and pompholix need not have been separated—scabies or psora is oftener a papular or a vesicular, than a pustular disease—acne and sycosis belong much rather to the class of pustules than of tubercles; and there is no notice taken of the morbid changes of the hair, nails, &c. All this is true, and we admit that some modifications (especially the retrenchment of many of the species) may, with advantage, be introduced into Willan's arrangement; but it still is, and in our opinion will long continue to be, the guide of medical men in investigating the diseases of which it treats. Plumbe and Rayer, who have commented upon its imperfections, have each proposed a classification of their own: with that of the former, founded partly upon anatomical, partly upon physiological, and partly, also, upon pathological speculations, we mean not to deal; the profession, while approving of the "Practical Treatise on the Diseases of the Skin," has not, and we think justly, adopted the arrangement which the author has employed; we shall, therefore, proceed to lay before our readers that on which the work now under review is founded. The following synoptical table presents us with a view of the—

CLASSIFICATION.

SECTION I.

DISEASES OF THE SKIN.

- 1°. *Exanthematous*: Rubeola, roseola, scarlatina, urticaria, erythema, erysipelas.
- 2°. *Bullous*: Vesication, ampullæ, pemphigus, rupia, zona.
- 3°. *Vesiculous*: Herpes, psora, eczema, miliaria.
- 4°. *Pustulous*: Varicella, variola, vaccina, vaccinella, ecythma, cuperosa, mentagra, impetigo, tinea, artificial pustules.
- 5°. *Furunculous*: Hordeolum, furuncle, anthrax.
- 6°. *Papulous*: Strophulus, lichen, prurigo.
- 7°. *Tuberculous*: Lupus, cancer, elephantiasis of the Greeks.

CHAPTER I.

Inflammations of the Skin.

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|---|--|---|-----------|--------------------|-----------|--|--|------------------|-----------|-------------------------------|---|---|--|
| | 8°. <i>Squamous</i> : <i>Lepra psoriasis</i> , <i>pityriasis</i> . | | | | | | | | | | | | |
| | 9°. <i>Linear</i> : <i>Fissures</i> . | | | | | | | | | | | | |
| | 10°. <i>Gangrenous</i> : <i>Malign pustule</i> , <i>carbuncle</i> of the <i>plague</i> . | | | | | | | | | | | | |
| | 11°. <i>Multiform</i> : <i>Burns</i> , <i>frost-bite</i> , <i>syphilitic eruptions</i> . | | | | | | | | | | | | |
| CHAPTER II.
<i>Cutaneous and Subcutaneous
Congestions and Hemorrhages.</i> | { Cyanosis, vibices, petechiæ, purpura hemorrhagica, ecchymosis, dermatorrhagia. | | | | | | | | | | | | |
| CHAPTER III.
<i>Neuroses of the Skin.</i> | { Exaltation, diminution, abolition of the sensibility of the skin, without appreciable alteration in the texture of this membrane. | | | | | | | | | | | | |
| CHAPTER IV.
<i>Alterations in the Colour of
the Skin.</i> | <table border="0"> <tr> <td><i>Decoloration</i></td> <td>{</td> <td><i>Leucopathia</i></td> <td>{ Partial</td> </tr> <tr> <td></td> <td></td> <td><i>Chlorosis</i></td> <td>{ General</td> </tr> <tr> <td><i>Accidental Colorations</i></td> <td>{</td> <td><i>Ephelis</i>, <i>lentigo</i>, <i>chloasma</i>,
<i>meladermis</i>, <i>icterus</i>, <i>nævus maculosus</i>,
bronze tint produced by
the internal use of lunar caustic.</td> <td></td> </tr> </table> | <i>Decoloration</i> | { | <i>Leucopathia</i> | { Partial | | | <i>Chlorosis</i> | { General | <i>Accidental Colorations</i> | { | <i>Ephelis</i> , <i>lentigo</i> , <i>chloasma</i> ,
<i>meladermis</i> , <i>icterus</i> , <i>nævus maculosus</i> ,
bronze tint produced by
the internal use of lunar caustic. | |
| <i>Decoloration</i> | { | <i>Leucopathia</i> | { Partial | | | | | | | | | | |
| | | <i>Chlorosis</i> | { General | | | | | | | | | | |
| <i>Accidental Colorations</i> | { | <i>Ephelis</i> , <i>lentigo</i> , <i>chloasma</i> ,
<i>meladermis</i> , <i>icterus</i> , <i>nævus maculosus</i> ,
bronze tint produced by
the internal use of lunar caustic. | | | | | | | | | | | |
| CHAPTER V.
<i>Morbid Secretion.</i> | { <i>Ephidrosis</i> , <i>acne</i> ,* <i>folliculous tumors</i> . | | | | | | | | | | | | |
| CHAPTER VI.
<i>Defects of Conformation and
Texture; Hypertrophies, &
Accidental Productions.</i> | { Distention of the skin; cicatrices, vegetations, <i>nævus hæmatodes</i> , subcutaneous vascular tumors; warts, pearly granulations; corns, <i>ichthyosis</i> , <i>horny appendages</i> , | | | | | | | | | | | | |

SECTION II.

ALTERATIONS OF THE APPENDAGES OF THE SKIN.

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|---|---|
| CHAPTER I.
<i>Alterations of the Nails, and
of the Skin which produces
them.</i> | { Onyxis; increased growth of the nails; spots, change of colour, fall, desquamation, reproduction, &c. of the nails. |
| CHAPTER II.
<i>Alterations of the Hair, and
of the Follicles which pro-
duce it.</i> | { Inflammation of the bulbs of the hair; accidental coloration, canities; alopecia; matting of the hair; plica; accidental pilous tissue. |

SECTION III.

FOREIGN BODIES OBSERVED ON THE SURFACE, OR IN THE SUBSTANCE OF THE SKIN.

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|-------------------|--|
| <i>Inanimate.</i> | { Dirt, dirt of the scalp of new-born children; inorganic matters, artificial colorations. |
| <i>Animate.</i> | { <i>Pediculus, humani corporis</i> ; <i>P. capitis</i> ; <i>P. pubis</i> ; <i>pulex irritans</i> , <i>P. penétrans</i> ; <i>acarus scabiei</i> ; <i>æstrus</i> ; <i>gordius</i> . |

* "This is the *acne punctata* of Bateman; the French term, *tannes*, is hardly to be rendered into English; *grub*, I believe, is the vulgar term for this affection.—T."

SECTION IV.

DISEASES PRIMARILY FOREIGN TO THE SKIN, BUT WHICH SOMETIMES PRODUCE PECULIAR ALTERATIONS IN THIS MEMBRANE.

Elephantiasis of the Arabs."—*Introduction*, p. xxvii.

Our remarks must necessarily be limited to the first and fourth sections—the second and third, it will be observed, appertain to the appendages of the skin, and may, therefore, at least for our present consideration, be excluded, especially as the title-page of the work professes to treat only of the "Diseases of the Skin."

The first impression left on the mind, from an examination of this classification, is the analogy which exists between its principles and those of the nosology of Cullen; we have the inflammations, or phlegmasiæ—the hæmorrhages—the neuroses, or nervous diseases—and the other three chapters might, with some propriety, be classed under the general term of cachexiæ. We may, therefore, presume that several, at least, of the objections which have been urged against the one, are not inapplicable to the other. We do not, it must be obvious, mean to say that the orders of Rayer are exactly parallel to, or correspond with, those of Cullen—the first glance must satisfy us that this is not the case; the lepra of the one is a phlegmasia, and a cachectic impetigo of the other; the psora of Cullen is most preposterously arranged as a local dialysis, or, in other words, a broken surface, whereas it is a vesicular inflammation of Rayer; but the principle which has led the latter to refer so many and so different diseases to his first chapter, is essentially the same which prompted the former to call diarrhœa and diabetes nervous diseases, and to attribute all the various forms of dropsy to a cachectic state of the constitution; in short, theory is the basis of a large portion of both systems, and is the pervading error in both. There is no difficulty in adducing a score of proofs, to shew how largely imbued with theory the system of Rayer is—take, for example, the eighth order, the squamous inflammations of the skin: it comprises three diseases, lepra, psoriasis, and pityriasis; now, not to allude to some of the varieties of the two former diseases, it is surely giving an almost illimitable extension to the word inflammation, to apply it to the majority of cases of pityriasis. Are they attended with pain, heat, redness and swelling? Assuredly not; and although the itching be sometimes troublesome, yet we cannot bring our minds to the conclusion, that therefore there must be some degree of inflammatory action present. Then again, that singular disease, ichthyosis, is banished from this order, because we are told "that it is almost always congenital, or developed in the first few months after birth, and is not attended either by sanguineous injection of the skin, morbid heat, itching, or by any other sign of inflammation;" the same may be said, however, of many old cases of lepra itself, and the circumstance of nearly the same treatment being found serviceable in both diseases adds not a little probability, that their proximate or essential causes are somewhat allied.

That most distressing malady, "prurigo," may also be adduced, as another instance of the extreme latitude which it is necessary to give to our idea of inflammation, if we are to assent entirely to Rayer's classification. The skin is often, nay generally, as pale as in health; there is frequently little or no elevation of the surface; there is certainly no pain, although

there may be an intolerable itching: the disease, indeed, appears to be one which affects the cutaneous nerves, much rather than the cutaneous blood-vessels, and it may be, therefore, referred, with quite as much propriety, to the order neuroses as to that of phlegmasiæ. Here, too, the appropriate treatment, at least in a vast number of cases, is the very reverse of the antiphlogistic, unless, indeed, we are to reckon stimulating lotions, bark and other tonics, opium, and so forth, as such.

If the preceding instances shew that not a little compulsion, nay, absolute violence, must be used, to force some of the members of Rayer's inflammatory diseases into his first section, what shall our readers say when they turn their eyes to the ninth order, which has received the classic name of "linear inflammations," vulgarly denominated "chaps," or cracks of the skin—and when they find that chapped feet, ulcerated nipples, the fissures in the skin, so common in dropsy and during pregnancy, have all, more or less, the features of inflammatory action. Then, again, is it right that the Proteiform class of eruptions, which succeed to primary syphilis, are classed among inflammatory diseases? Certainly not—if we are to attach the ordinary meaning to the word inflammation; for they neither have, at least in a multitude of cases, the outward and visible signs of increased action, nor are they attended with the constitutional symptoms of active pyrexia, and lastly the successful mode of treatment consists rather in strengthening the powers of the system than in lowering them. These arguments cannot, in our judgment, be gainsayed, or answered, and afford sufficient grounds for withholding our entire assent to the classification of Rayer, in all its details. If there was need of any more, we might allude to the exclusion of the various forms of acne, and of follicular tumors from the first section, and their insertion in the fifth. True it may be, that in these diseases the secretions of the skin may be morbid; we do not deny it; but the simple question which we propose is, whether there is no attendant inflammation at the same time; and if there is, how comes it that they are not classed with the other inflammations. One other remark upon the arrangement and we have done.

It may be fairly doubted, whether the elephantiasis of the Greeks, the elephantiasis of the Arabians, and the production of what have been called "mamillated excrescences" on the skin, ought to be viewed as diseases so widely different from each other as to require that all three be put into different sections of the code. Our knowledge indeed of the morbid changes connected with the diseases now mentioned, is, it must be confessed, far too imperfect to warrant us in giving a decided opinion either way; but we think that it would have been wiser to have brought them nearer together, with the view, had there been no other reason, to compare and contrast them together.

We had almost forgot to allude to the capricious arrangement of the orders in the first section; ought not the papulous diseases to precede the bullous, vesicular, pustulous and tuberculous, for the very good reasoning, that these four last forms of cutaneous disease very generally exhibit a papulous appearance at first? and again, two of the members of the tuberculous order seem very much akin to those of the ninth or gangrenous.

Such are some of the objections which may be urged against our author's method of classifying the diseases of the skin; and we are the more anxi-

ous to direct the attention of our readers to the consideration of what has been stated above, as the prevailing doctrine of the whole work, not only in regard to the nosology proposed, but equally so, to the treatment recommended, is, that inflammation in some form, part, or organ, is an almost invariable and necessary accompaniment of cutaneous eruption. Every page of the work before us bears testimony that Rayer is a most fond admirer of the Broussaist creed; we think, extravagantly so; because, while we admit that the "Physiological Physician" of the Val de Grace, deserves well of the profession for having introduced a more rigorous and comprehensive method of examining all the symptoms of a disease, and for having disabused our minds of many of the phantom dangers of debility, he seems to us to have overstepped the bounds of legitimate deduction, and to have inferred the existence of his "favourite disease," although neither indicated by symptoms during life, nor verified by necroscopic inquiry. The mischievous effects of ultra-Broussaism may not indeed be so great as those of an opposite system; but both are bad; and bad, because they are exclusive. The practice of a physician attaching himself to one particular doctrine, which is made applicable to all diseases, and to all circumstances of disease, arises, we fear, too often from mere selfish and mercenary motives; the love of notoriety, and the ambition of success are dangerous enemies to quiet thought and cautious reasoning; and when to these impulses is added the obstinacy of wounded pride, or of audacious conceit, or of arrogant ignorance, we need not wonder that strict veracity is sometimes sacrificed to pompous display. Now, we do not mean to impeach the good faith of M. Broussais and of his disciples; but we must certainly question their candour or clear-sightedness. They cannot possibly have failed to observe, and if so, they ought to acknowledge, that patients labouring under their supposed gastro-enteritis have in a thousand instances speedily recovered under the use of occasional aperients and of a light bitter tonic, after having been subjected to leeching, and leeching, and leeching, and to all the ills of a most rigid "diète methodique." We again confess that benefit, decided benefit, has been derived from the more scrutinizing method of examining disease introduced of late years by the physiological physicians of Paris; for the grand aim and object of a skilful practitioner will ever be to arrive at a correct diagnosis of his patient's case; and the knowledge of this cannot be acquired except by a diligent and most inquisitive examination of all the leading functions of the body; of sensation, of motion, of digestion and assimilation, of respiration and so forth; and if this be uniformly done, with a mind unfettered by the opinions of others, and unprepossessed with any favourite doctrines, we venture most unequivocally to assert, that no exclusive system of therapeutics will be received as all-curing or catholic.

The "purgez a droit" and "saignez a gauche" practice, must therefore be deprecated, at least to the extent to which it has been carried within the last five and twenty years. The weapons of ridicule and satire are often more effectual in conquering prejudice and error, than those of grave reasoning, and we doubt not that the wit of a Le Sage or of a Moliere could, within the compass of a single page, most triumphantly annihilate the many goodly volumes which have so long been received as gospel truth by a wondering profession. We have been led to make these few remarks by the

perusal of the work before us; we think that it is too largely imbued with one doctrine throughout; a doctrine, which however useful in many of its precepts, is apt to be carried to an extravagant extent, and to lead to a practice often most unsatisfactory, and sometimes decidedly pernicious; for example, we are told that a sty on the eyelid is very generally indicative of internal inflammation; "Hordeolum almost always coincides with gastro-enteritis." Surely this was what Sterne would have called "rather too hobby horsical." Indeed the author himself seems on one occasion to be aware of this; for at page, xvi. of the introduction (which by the bye is a most admirable essay, and in itself would render the present work well worthy of study) we find it stated—

"Up to the present time but a very small number of anatomical researches have been made on diseases of the skin. Among the authors who have seen and pointed out the importance of them, there are some who have given them a false direction, in pointing their attention principally to internal lesions of the lungs, digestive organs, and uterus, which have taken place accidentally in individuals attacked by chronic diseases of the teguments; but that these observations have been of some utility, is shown by their having proved, by numerous examinations of the body, that these internal lesions more frequently coincide with inflammations of the skin, than several other affections which may be equally complicated with them. New anatomical researches on the structure of the alterations of the teguments have furnished me with valuable characters for the distinction of various forms of phlegmasiæ; and I have given, in the history of rubeola, erysipelas, variola, tinea favosa, purpura hemorrhagica, onyxia, ichthyosis, &c. some anatomical details which have not perhaps been hitherto published with equal accuracy."—*Introd.* xvii.

We quite coincide in the correctness of these opinions. Before proceeding to the examination (necessarily a short one) of the contents of this volume, the following remarks on the delineation of skin diseases are so just, that we cannot do better than extract them.

"Some authors have endeavoured to make their descriptions of these diseases more striking by the aid of coloured figures: the two most beautiful collections of this sort are, without exception, those of Willan and Bateman,* and of Alibert.† Most of these plates exhibit, however, only one of the stages of the inflammation which they are intended to represent. Thus it happens, that some diseases described as *pustulous* have been exhibited in the *squamous* state; that some others also, placed among the *pustulæ*, have been represented in the *tuberculous* state; that others, lastly, have been only drawn in the state of *crusts*, a secondary character, and common to several very different forms of *phlegmasiæ*. These faults I have endeavoured to avoid in arranging the plates of this work.‡ The primary forms of the inflammations of the skin, and the alterations which succeed them, have been represented carefully after nature, or the best engravings that have been published.

Figures of the natural size, in which the head, trunk, limbs, or whole body, are represented, would be out of place in an elementary work; while, on the

* Bateman (Th.) *Delineations of Cutaneous Diseases*, 4to. London, 1817.

† Alibert. *Op. cit.*

‡ Mr. Dickenson has committed the egregious blunder of frequently referring to particular plates, attached to Rayer's work; and yet we find that he has not published any of them.

other hand, they would only have the trifling advantage of exhibiting the same alterations in a greater number of points: a hundred pustules, or twenty tubercles of cuperosa, for example, scattered over the face of a woman, with a design of the head and bust given, and additions more less elegant, do not yield a juster idea of the pustulous form of this affection, and of the tubercles by which it sometimes terminates, than does a piece of skin on which these alterations are shewn. Lastly, some papulæ of prurigo or lichen, a few squamous plates of lepra or psoriasis, &c. suffice to make known the character of these diseases, without its being necessary to represent all the regions of the body upon which they have been observed."—*Introd.* xviii.

The first order, the exanthematous, comprises six genera, five of which belong to Willan's exanthematous order, viz. rubeola, roseola, scarlatina, urticaria, erythema, and erysipelas. Rayer is decidedly right in excluding purpura from this order, and in admitting erysipelas, which Willan strangely enough separated from erythema—only a milder form of itself.

"The red tint produced by the effusion of blood into the subcutaneous cellular tissue or skin, differs so much from that of the exanthemata, that we are at a loss to conceive how two such observant men as Willan and Bateman could see any resemblance between petechiæ, purpura hæmorrhagica, and the exanthemata. In the latter the red tint is obscure, and the diagnosis more difficult in negroes than in whites.

Exanthemata are sometimes complicated with other, and particularly with papulous, vesicular, and bullous inflammations of the skin. Thus, intense erysipelas, abandoned to itself, is frequently surmounted by bullæ similar to those of pemphigus. In this point of view, it seems to form an intermediate link between exanthematous and bullous inflammation." 9.

The general scope of treatment, in the exanthemata, is well and clearly stated in the following extract.

"They require the antiphlogistic treatment and diet. When caused by miasmatic poisoning, this treatment must be followed with more reserve. We must not expect to cut them short by repeated bleeding, as has been advised by some pathologists. It is important also to keep in mind, that inflammations of the gastro-pulmonary mucous membrane present a prominent feature in exanthematous diseases of the skin, and that it is to this, above all other complications, that the attention of the practitioner should be directed. The moment symptoms of these internal phlogoses are observed, they should be narrowly watched, and, if intense, subdued; treating them nearly as if the cutaneous affection was not present. These gastro-pulmonary inflammations sometimes survive that of the skin. They require more cautious treatment during convalescence, as a careless regimen or injudicious medicine may aggravate them, and so become the cause of a more or less grave relapse." 9.

In the description of rubeola, we are told that this disease "differs from roseola, not only in the form of the exanthema, but also by the gastro-intestinal inflammation which accompanies it;" and yet, a few pages further on, it is stated that "this fugacious inflammation (roseola) is often connected with gastro-enteritis, which may either precede, accompany, or continue after it has disappeared;" and, to add to this confusion, in the very same page from which this latter extract is taken, we are informed how to distinguish the two diseases, thus:

"In Rubeola, the eruption, usually preceded and accompanied by a gastro-bronchitis, takes place regularly the fourth day of a febrile affection; it is prolonged till the seventh or eighth, and during convalescence gastro-pulmonary

inflammations, more or less severe, frequently supervene. In roseola the eruption appears without any obvious cause, or it may seem to depend on the existence of some other cutaneous inflammation, or on phlogosis of the gastro-pulmonary mucous membrane :” 19.

An apt illustration, among many others, of the indiscreet adoption, by our author, of the Broussian doctrines. It has been a question among medical men, whether Willan is right in admitting, as distinct species of the genera rubeola and scarlatina, those forms of the diseases, in which either the exanthema is absent, while the other symptoms, such as the catarrh in the one case, and the affection of the throat in the other, are present; or in which the exanthema exists, unattended with these symptoms now mentioned—thus, authors mention a “rubeola sine catarrho,” and “a scarlet fever without eruption.” Rayer says—

“Most of those cases entitled *rubeola without catarrh*, and mentioned in some treatises, are really nothing more than cases of roseola or erythema. The presence of the exanthema prevents the disease from being confounded with pulmonary catarrh. Those pretended cases of *measles without eruption* would more properly be entitled to the name of *catarrh without measles* : for, even supposing that the gastro-pulmonary inflammations that are observed during epidemics of measles, to be produced by the specific cause of this latter, still they present no peculiar characters distinguishing them from ordinary phlegmasiæ of the air and digestive passages, or anything to authorize us to consider them as varieties of rubeola.” 13.

These sentiments we consider to be too absolute; for there can be no doubt that, during the prevalence of an epidemic, either of measles or of scarlatina, it is by no means unfrequent to observe among the members of the same family, living together, and exposed to the same influences, some affected with the genuine disease, we mean that form in which both the internal and external symptoms are present, while others exhibit only one set of them. Now, under these circumstances, we consider it to be rather a stretch of incredulity, to deny the identity of the two affections; still it is possible that they are indeed different; and, perhaps, the only satisfactory method of deciding the question is, to ascertain whether those patients in whom only one set of the symptoms shew themselves, be as effectually secured against a return of the disease as the others. The question is not easily solved; but we can see no other way of doing so, but that we have now mentioned.

In the account given of the diagnosis between the exanthema of scarlatina, and that of roseola, it is laid down that—

“The tint of Scarlatina is much brighter, and more permanent and uniform than that of roseola. In scarlatina the redness disappears on pressure, and takes place again from the circumference towards the centre of the finger print, when the pressure is removed; while in roseola, the morbid coloration collects indiscriminately upon all the points which had been subjected to pressure.” 20.

Is this distinctive character uniformly correct? Our own experience does not warrant us to decide. A much more important topic, appertaining to scarlatina, arrests our attention. So essentially inflammatory is this disease, in our author's opinion, that he hesitates not to affirm that, just in proportion to its severity and danger, so is the amount of inflammation present,

and so, therefore, ought to be the activity of the antiphlogistic treatment. The narrative of the worst species, the scarlatina maligna, is thus very faithfully given.

"It comes on like scarlatina anginosa, and in the course of two or three days is characterised by symptoms of extreme gravity. The appearance of the exanthema is tardy, its colour feeble and livid, mixed with petechiæ, and its duration is uncertain. It may disappear and reappear several times. The pulse is small and irregular, the teeth and tongue are covered with brown or black crusts, the eyes are greatly injected and sight confused, the cheeks are of a deep-red colour; there exists also deafness and delirium in adults; coma and agitation in children; fetid breath, difficult laborious respiration, increased by the thick viscid mucosities deposited in the pharynx; deglutition is difficult or impossible, with constriction of the jaws, and a blackish exudation on the surface of the amygdalæ and neighbouring parts. A continual coma, difficulty of respiration, abundant diarrhœa, and formation of numerous petechiæ, announce approaching death. The few patients who survive these sufferings are then attacked by inflammations of the air-passages and digestive organs, which remain after the cure of the exanthema. Gangrenous eschars are often found over the trochanters and sacrum: they are followed by extensive ulcerations, the difficult cure of which lengthens convalescence. When associated with chronic cæco-colitis, these ulcerations are always dangerous, and sometimes fatal." 24.

This frightful form of the disease is occasioned, we are told, "by the simultaneous or successive inflammation of the pharynx, skin, stomach, intestines, larynx, and brain" (by the way, a strange mode of arrangement): and in the description of the treatment it is stated, that—

"In scarlatina *anginosa*, bleeding from the arm or foot, the application of leeches to the neck or epigastrium, mild sinapisms to the feet, emollient cataplasms to the throat, mucilaginous drinks, &c. are usually indicated. In scarlatina *maligna*, or, to use a more accurate expression, scarlatina complicated with intense inflammation of the pharynx, stomach, intestines, and bronchia, cerebral congestion, or arachnitis, &c. the antiphlogistic measures should be more active, according to the gravity of these different affections." 27.

Well may the author add, "we must not carry the bleedings so far as in themselves to become dangerous; and judgment is requisite here as well as in the treatment of other inflammations."

The above practice, in the extent recommended, we hesitate not to denounce as most murderous: it is a gross and fatal error to believe that the malignancy of this, and of other putrid diseases, is attributable solely to the extent or severity of the existing inflammation; and the consequences of its adoption have been quite as fatal as those ever caused by the humoral pathology. The only rational, and certainly the only safe doctrine upon which we can proceed in the treatment of such diseases, is one compounded partly of the Broussaian and partly of the humoral principles;—that the condition of the blood and of the secretions is materially altered (we speak neither of the nature nor of the cause of the alteration) even from the first, no one, who uses his eyes and will speak the truth, can for a moment deny; and equally true it is, that an inflammation, or congestion, or something akin to these morbid states, does exist at the same time in some parts or organs of the body. We challenge the most enthusiastic of either sect to gainsay either of these propositions; and yet, strange to tell, in spite of

their reason, they almost wilfully shut their eyes to the truth, and make their practice belie their convictions. We again repeat, that the only rational view of the subject is to study all the symptoms, and to exclude none; to examine the blood, to examine the secretions, the state of every organ as far as we can, to discover, if possible, whether any be more oppressed or affected than another; to watch the effects of the remedies employed, and all the time to keep our minds from being swayed by any preconceived or pre-adopted theories. What may be termed the "eclectic" mode of treatment is therefore decidedly the best; viz. to apply leeches where congestion or inflammation is ascertained to exist, to exhibit salines or vegetable acids, to sponge the surface repeatedly with antiseptic lotions, such as the solutions of the chlorides, to regulate the secretions, and, if necessary, not to withhold stimulants, of which by far the best is ammonia—it is much preferable to any spirituous and vinous preparations. Should these last be necessary, it will be proper to exhibit them in effervescing draughts; and we avail ourselves of the present opportunity of strongly recommending a modification of these draughts, which we have been long in the habit of using with most satisfactory success in many malignant or putrid diseases. The addition which we make is 15 grains or a scruple of common salt, (muriate of soda,) and a small tea-spoonful of the spiritus ætheris nitrici. The draught should be repeated every two or three hours.

The chapter on erythema and erysipelas is exceedingly good, and merits commendation throughout, with the exception of the following sentence.

"Since Dessault, most French pathologists recommend the administration of an emetic at the outset of erysipelas. It produces a salutary effect when this affection has followed wounds of the head, but is dangerous when gastro-enteritis exists, the morbid phenomena of which have been designated collectively under the names of *bilious plethora*, *intestinal* or *gastric irritation*, *bilious fever*, &c., though in these cases it has been more especially recommended." 48.

Bullous Inflammations. On referring to the synoptical table at the commencement of this article, it will be observed that five diseases belong to this order. Willan has only three, viz. erysipelas, pemphigus, and pompholyx;—this is one of the most faulty parts of his system. Erysipelas, as we have already stated, belongs rather to the exanthemata; the bullæ being quite accidental, or, at least, by no means essential to the disease:—then again, pemphigus and pompholyx are assuredly not distinct diseases; the mere presence or absence of febrile symptoms is not sufficient to warrant Dr. Bateman in saying that they "differ most materially" from each other.

The transference of rupia from the order "vesiculæ" to that of the "bullæ" is of questionable propriety; and the very description which Rayer has given, applies much better to a vesicular than to a bullar disease. He says, "The bullæ are small, distinct, and flat, with inflamed bases, containing a transparent humour, which gradually becomes turbid, puriform, and the bullæ are transformed into thick, chocolate-coloured crusts, from the dessication of the serous sanguinolent fluid." Sometimes indeed these crusts become large and very prominent, so as to resemble limpet-shells; but they are very different from the dried bullæ or bladders, as seen in pemphigus. Rupia appears to be a disease intermediate between the vesicular and the pustular orders; it has, moreover, many points of affinity to ecthyma; they

both occur under similar cachectic states of the constitution, and the same mode of treatment is applicable to both: for practical purposes, therefore, they may be viewed as one disease. Indeed it is often quite impossible to draw any strong lines of discrimination between some cutaneous affections, the interval between them being quite hazy and indistinct.

With respect to *zona*, we have no doubt in saying that Rayer is wrong when he places it among the "*bullæ*;" it is most decidedly a vesicular disease; and a critical reader cannot fail to be surprised at finding the author himself admitting that "*zona* indeed really differs from the herpes phlyctenoides *only* in the singular form it assumes," as its very name imports; for whatever be its seat, "*zona* shews itself under the form of a semicircular band of more or less extent, covering part of the trunk or of a limb." Perhaps it would be strictly more correct to designate *rupia* and *zona* as bullo-vesicular than as simply bullous or vesicular diseases; but as the object of nosology is only to afford the convenience of an arranged dictionary or catalogue, it would not serve any practical good to establish more divisions.

Vesicular Inflammations. Under this order, Rayer enumerates four genera, viz. herpes, psora, or scabies, eczema, and miliaria: Willan and Bateman's corresponding order includes seven, which are varicella, vaccinia, herpes, *rupia*, miliaria, eczema, and aptha.

It will be useful to discuss briefly the propriety, the comparative merits of these two classifications. Three only of Willan's genera are admitted into Rayer's order; we have already seen that he has excluded *rupia*.

"With regard to varicella," says he, "I admit that, of three or four varieties which this disease offers, designated by the English pathologists as *chicken-pox*, *swine-pox*, *hives*, and *modified small-pox*, one at least, the *chicken-pox*, is really vesicular; but certainly, the other varieties, particularly *hives*, and *modified small-pox* are constantly pustulous diseases. By this double character, varicella forms a connecting link between vesicular and pustulous inflammations. At liberty to place it in either of these groups, I prefer classing it among the pustulous, thus connecting it with variola, of which it may, perhaps, be a modification." 68.

These remarks have acquired more credit since Professor Thomson of Edinburgh and others have published their speculations, as to the identity of chicken-pox, with modified small-pox. It seems to us utterly impossible to decide whether we are to view these diseases as more strictly vesicular or pustulous; the decision will depend altogether upon the period of the eruption at which we draw our description; fortunately it is of no moment in practice. Nearly the same may be said of vaccinia or cowpox.

The genus, *aptha*, has, it must be confessed, no business among cutaneous diseases, unless indeed we were to admit all other affections of the mucous membranes. The only other disease in Rayer's catalogue which we have not yet alluded to is psora or scabies: and with respect to it we may with perfect propriety say, that medical men may please their fancy where they place it, and whether they call it a vesicular or a pustular disease; for even Bateman acknowledges that "from its affinity with three orders of eruptive appearances, pustules, vesicles, and papulæ, it bids defiance to any attempt to reduce it to an artificial classification." On the whole, however,

it is more correct to call it a vesicular than a pustular eruption; and the description given by Willan and Bateman will assuredly bring their readers to this conclusion; for we are told that even in the scabies papuliformis "the unbroken elevations, when carefully examined, are found to be vesicular and not papular." Such are the differences between the divisions of the order *vesiculæ* proposed by the English and French nosologists; the three diseases of herpes, miliaria, and eczema, are common to both systems. From what has now been said, it may be deduced as a very fair and rational inference, that it would perhaps be wiser to employ a general term, compounded of the two terms, for the two orders of skin disease, viz. the pustular and the vesicular, and to distinguish them into the pustulo-vesicular and vesiculo-pustular, according to the predominating character of the eruption. The only member of the family which might be refractory, and to which we should be obliged to use a rather compulsory mode of introduction is miliaria; for, strictly speaking, it is vesicular, or at least very nearly so, throughout its course. It may be said likewise that small-pox is genuinely and uniformly pustular; it is so certainly in every case during its progress; but it is very common to observe numerous distinct vesicles interspersed with the papulæ when the eruption first appears.

The only remark which we shall make on the vesiculous diseases of our author respects the description given of the miliaria, (which it is to be remembered includes the sweating sickness of the 16th century, and the epidemics of the "suette miliare," which have occurred of late years in some of the French provinces.) He says that "it is an acute contagious disease, affecting at the same time the gastro-intestinal mucous membrane and the skin," and yet we are informed in the next page, "that several physicians have inoculated themselves with the matter of the vesicles with impunity." The idea of any contagious property is quite chimerical, and has arisen from the disease, at least one form of it, appearing as an epidemic; indeed so far from miliaria being generally contagious, it may be very often induced artificially, especially in plethoric and irritable subjects, by confinement in heated chambers, and the use of hot stimulating diluents; hence it used to be common about sixty years since among puerperal patients; and now it is very rarely met with. The epidemic form is not known in this country; yet it may be interesting to learn its characters from our author, who published an account of it, as it appeared in the department of the Oise, during the year 1821. He says—

"In the epidemic which prevailed in the department of the Oise, 1821, several individuals who retired to bed in perfect health, on awaking found themselves attacked by the disease, and were inundated with sweat, which continued till death or convalescence took place. In some instances, a scarcely sensible febrile action, a burning heat, or a creeping sensation running through the limbs, with almost always a sense of constriction in the epigastrium, preceded for several hours the appearance of the sweat, or rather of a hot vapour, which at first confined to certain parts of the body, afterwards extended over the whole surface. The mouth was clammy, covered with a dirty-white coat, rarely yellowish; there was little or no inclination for food; urine natural. The bowels were constipated during the whole course of the disease, in general. In most cases the pulse was natural, but became frequent when the eruption appeared. Respiration was attended by that kind of embarrassment which takes place when the temperature is too high. The encephalon, the organs of sense, and those of

generation, were not included in these derangements. This state continued, with slight variation, the second, third, and fourth days of the disease. On one of these days, and usually the third, after slight smarting, the eruption appeared, first on the sides of the neck, on the nucha towards the ears, and under the breasts in women, then on the back, inside of the arms, lower part of the abdomen, and inner parts of the legs and thighs.

Miliaria may be general and rapid, partial and slow, circumscribed and ambulant, extensive and spreading, distinct or confluent. The vesicles which characterise it are about the size of a millet-seed, pearly and diaphanous, more distinct when the skin is put upon the stretch and looked at obliquely, and are perceptible to the touch. These vesicles are often interspersed by red inflamed papulæ, which render the skin irritable; lastly, true bullæ may be developed accidentally on different parts of the body.

The duration of the vesicles is two or three days. Then they dry, and are followed by a more or less considerable desquamation. This vesicular inflammation is attended by an abundant fætid sweat, having a similar odour to that disengaged from rotten straw. It appears at the commencement of the disease, and is continually exhaled, under the form of a dense steam, its whole duration." 96.

He adds—

"It is seen only between the forty-third and fifty-ninth degrees of latitude. Humid and shaded situations favour its developement; but it spreads, like measles and scarlatina, to the most elevated places." 97.

Pustulous Inflammations. It is unnecessary, after what we have stated above, to enlarge upon the general features of this order of cutaneous affections; we shall therefore content ourselves with merely pointing out the leading differences between the arrangements of Willan and Rayer. The one enumerates five pustulous diseases, viz. impetigo, porrigo, ecthyma, variola, and scabies; the other subjoins to the four first, (scabies being considered vesicular,) varicella, vaccinia, vaccinella, cuperosa, (including the varieties of acne,) sycosis and artificial pustule. The following epitome of the authors reasons of dissent from the arrangement of his predecessors is brief and satisfactory.

"I have already remarked, that in Bateman's classification, psora has been erroneously placed among the pustulous diseases, and I have explained the motives which have led me to place variola with varicella, three varieties of which are indisputably pustulous. Vaccina and vaccinella ought to be placed in the same class, and not with vesicular diseases. Indeed, pustules differ from vesicles, not only in containing pus or non-serous humour, but by the depth and intensity of the inflammation. This latter point appears the more important, as the serosity of all vesicles becomes turbid and purulent in the stage of desiccation, and the contents of all pustules are at first serous. Lastly, Willan and Bateman were deceived when they supposed that cuperosa and mentagra were announced by tubercles, for these inflammations are primarily *pustulous*." 99.

Vaccinella, or modified cow-pox, has hitherto been scarcely recognised by English writers; and as it is of high importance at the present time, when serious doubts are entertained by so many of the protecting efficacy of vaccination, to arrive at some satisfactory conclusions, it cannot fail to interest our readers to be made acquainted with the sentiments of foreigners. The extract is long, but very valuable.

"I designate under the name of *vaccinella*, a pustulous phlegmasia of the

skin, which the insertion of vaccine virus, of *cow-pox*, or of *grease*, sometimes produces in individuals who have previously had small-pox. It may be also produced by the inoculation of variola and vaccina closely following each other; it is occasionally developed in man by the inoculation of spurious cow-pox. This disease bears the same relation to vaccina that variella does to variola.

*Vaccinella produced by the inoculation of vaccina in individuals previously variolated.** When those who have been the subjects of small-pox are vaccinated, it usually is not productive of any result, and the punctures soon heal up; but sometimes a *vaccinal eruption* is developed, *modified*, both in its external characters and progress. This cannot be better exhibited than in those cases of variella which the insertion of variolous virus produces in some vaccinated individuals; or than in those cases in which inoculated or variolated individuals are submitted to the influence of a new inoculation of variolous matter. Whichever of these takes place, the progress of this modified vaccina is as follows:

From the first to the third day the punctures inflame; pustules form, generally resembling those of vaccination. Their edges are flat, unequal, and not distended by the contained humour, which is always of a limpid yellow, and small in quantity. The areola, at times pretty vivid, is rarely so large as in vaccina, and is later in its appearance. During this stage, the patient usually experiences an insupportable itching in the punctures; the axillary glands become enlarged and painful, cephalalgia supervenes, and sometimes irregular accessions of fever. The inflammatory stage is very rapid; there is neither tumour not circumscribed induration, as in vaccina; and if there is tension about the wound, it is irregular and superficial. The crusts, well formed about the seventh or eighth day, do not fall so soon as those of vaccina; they occasionally present the same appearance, with this only difference, that they are not so large, or thick, and leave no cicatrix, but only a kind of spot on the skin.

20. *Vaccinella produced by the accidental insertion of cow-pox in a subject who had been variolated.* Jenner† reports that he saw in a farm, five persons who had previously had small-pox, contract vaccina, by coming into contact with cows suffering under the disease; but he adds, that it was incomparably more benign than in ordinary cases.

30. *Vaccinella from the inoculation of grease, in a variolated subject.‡* At the beginning of the year 1801, Mr. Loy saw an eruption on the hands of a farrier, who had previously had small-pox. This eruption appeared not long after the man had dressed a horse affected with *grease*. It consisted of distinct, round pustules, containing a limpid fluid, resembling the vesicles of a burn, having in their centre a small black spot, and which were surrounded by an areola. In the whole duration of the eruption, no fever was manifested.

40. *Vaccinella from the inoculation of variola, a short time subsequent to vaccination.*|| When the variolous and vaccine virus are inserted at the same time, they reciprocally modify the action of each other. The vaccine pustule thus produced is smaller than usual, its progress more tardy; the areola scarcely perceptible, or formed prematurely. On the other hand, the variola is altered, and it appears under the form of hard, glistening pustules.

50. *Vaccinella produced by spurious cow-pox.¶* 'We frequently see,' says Jenner, 'ulcers and pustules spontaneously developed on the teats of cows; par-

* *Rapport de la Commission Medico-chirurgicale Institutée à Milan.* Paris, an. x.

† Jenner, *An Enquiry into the Causes and Effects of the Varolæ Vaccinæ.* 4to. London, 1793.

‡ Loy, *Account of Experiments on the Origin of Cow-pox*, 1802.

|| Willan, *On Vaccine Inoculation*, 4to. Lond. 1806.

¶ Jenner,—Tellegen, *Dissertatio de Variolis Vaccinis.* Groningæ, 1801.

ticularly in the spring, when they change their food. These pustules may be transmitted to those persons employed in milking; but they are always of a much more benign character than those of a true *cow-pox*, and do not protect from variola.

Of all these eruptions, one only has been well studied, viz. that produced by vaccination, in previously variolated individuals. The characters which distinguish vaccina from vaccinella have been already described (§260.) These also differ from the accidental pustules which have been denominated *false vaccina*, or *false variola* (according as they have been produced by pus taken from vaccinated or variolated subjects), by their progress, and umbilicated form.

Other varieties of vaccinella have been rather indicated than described, and their history requires to be duly studied." 129.

No pustular diseases are so difficult to describe, and accurately to discriminate, as the varieties of impetigo and of porrigo, or, as Rayer calls it, tinea. The portion of Willan's work which treats of them is decidedly one of the most faulty, and some of the errors which he has committed in his arrangement cause, unfortunately, a direct and practical mischief. The distinction which he has made between them is founded upon the supposed contagion of the one set, and the non-contagion of the other; had he been able, indeed, satisfactorily to point out the diagnostic characters of each, the distinction would be one of the most useful that could be adopted. Impetigo he defines to be an "eruption of non-contagious psudracia, occurring chiefly on the extremities, and without fever." He enumerates five species—*imp. figurata*, *sparsa*, *erysipelatodes*, *scabida*, and *rodens*. Rayer remarks, and we quite agree with him, that "Willan has made too many varieties of impetigo: his *I. scabida* should be joined with *I. figurata*; *I. erysipelatodes* is nothing but the *eczema impetiginodes* of the same author; lastly, *I. rodens* is really only a variety of cancerous ulcer, the edges being covered by accidental psudraceous pustules." But a much more grave objection seems to be, the omission of the disease long known under the names "crusta lactea," or "milk scall," from the order impetigo, and its insertion in the order porrigo. Bateman has, indeed, pointed out this error, and proposes to call it "impetigo larvalis;" but, with most injudicious devotion to his master's precepts, he has retained it among the species of porrigo; the characters of the eruption, as well as the non-contagion of the disease, ought to have determined him to make the necessary change. Rayer, too, has foolishly followed his predecessors, and has introduced not a little confusion himself into his order "tinea," which corresponds to Willan's "porrigo." Indeed, there is no order of cutaneous affections which stands so much in need of a thorough revisal as this; Willan's arrangement is bad, and Rayer's is not much better—for, not to mention the "porrigo larvallis" of the one, and the "tinea mucosa" of the other (the same disease, be it remembered), which, as we have already said, is decidedly an impetigo, the species *P. furfurans*, and *decalvans*, and perhaps, also, the *favosa*, are of most questionable admissibility; and, to make things worse, the French nosologist applies the specific names used by Willan to different species, as we shall presently shew.

Willan enumerates six species, viz. *P. larvalis*, *furfurans*, *lupinosa*, *scutulata*, *decalvans*, and *favosa*. It is very doubtful whether the *P. furfurans* is really contagious; and the circumstances under which it usually appears, viz. at the termination of the "*P. scutulata*," or genuine ringworm, when

the pustulous disease is subdued, but before the skin has returned to its healthy condition, and moreover, the resemblance which it has, after some continuance, to the *P. decalvans*, should forbid, in our opinion, its insertion in the genus at all. With respect to the latter species, or "*decalvans*," we cannot do better than extract the following passage from Rayer.

"One of the most remarkable varieties of alopecia (or baldness) is that which Bateman designated under the improper name of *porrigo decalvans*. The scalp of persons affected with it presents one or two circular patches entirely bald in the midst of a luxuriant head of hair. The skin is shining without being red, and is often remarkably white. The area of these circular spots, progressively increases. If several exist close together they unite, and if left to itself the disease may affect the greater part of the scalp. Bateman supposed that small pustules were developed at the root of the hair, but acknowledges never to have seen them. I am, myself, ignorant of the nature of the affection of the pilous follicles in this variety of baldness; I can affirm, however, that there does not exist, on the surface of the scalp, either vesicles, pustules, or any other form of the phlegmasia; the skin is always colourless. The new hair growing on these surfaces is, in general, of a finer texture and lighter colour than the original. It is generally grey in adults. I have observed this affection both in children and adults, but cannot point out its causes of development." 365.

Moreover, there are no established proofs of its contagiousness. We have thus dismissed three of Willan's six species, and are inclined to extend the 'congé' to a fourth, viz. the *P. favosa*. It is certainly much more closely allied to the "*P. larvalis*," or "*crusta lactea*," than to any of the other species enumerated by Willan; this, of itself, will make us rather sceptical of its truly porriginous character; and what may well add to our doubts is, the circumstance of Bateman, in the description which he gives of it, never once alluding to its contagious property; and, again, the analogy which exists between it and some of the pustular cutaneous affections, which we witness in the second stages of syphilis, especially after the injudicious exhibition of mercury, may be adduced as a most staggering argument. The other two remaining species of *porrigo* we shall leave "intact," and now proceed to make a few remarks on the division of the genus "*tinea*," by Rayer.

"I am induced (says he) to admit four species of *tinea*; *T. favosa*, *T. annularis*, *T. granulata*, and *T. mucosa*. I must premise, however, that I regard these four pustulous inflammations as perfectly distinct from each other, and not as species or varieties of the same disease. Their individual existence rests on characters as marked as those of any other pustulous inflammation of the skin. Of the *tinea*, some are contagious, others not; this alone destroys all supposition of the identity of the nature of these diseases. Lastly, they can still less be considered varieties of the same affection, from the fact of their being found complicated with one another. I use the generic term of *tinea*, only because it has been so long in use, and not as indicating any identity between diseases which does not really exist." 151.

It is to be regretted that he does not retain the generic term of *tinea*, after having given such satisfactory reasons for expunging it. The *T. mucosa* is, as already mentioned, the same disease as Willan's *porrigo larvalis*. The *T. favosa* includes Willan's *P. favosa* and *P. lupinosa*; the description of it is perplexingly confused, and, if we are not much mistaken, this confusion arises from two very distinct affections being blended together; the defini-

tion given is "a chronic contagious inflammation of the skin, characterized by *very small pustules*, the summits of which soon become converted into yellow, very adherent crusts, depressed into a cup-like shape;" and yet there is repeated mention afterwards of "*favous pustules*," which, in the usual acceptation of the term, are *not very small pustules*. If, by "*T. favosa*," we are to understand the disease which, by Cullen and others of the olden times, was called *tinea capitis*, or scald head, then assuredly it must be very materially altered in its characters. According to their descriptions, the pustular eruption was confined to the hairy scalp, and did not extend "to the shoulders, arms, trunk, and lower extremities," as stated by Rayer, who tells us that he has seen it on these parts, while the scalp remained unaffected. But we put the simple question—is the eruption on the arms and legs really and truly contagious? We think not; and, if our opinion be correct, then it must be confessed that two diseases have been confounded together. The subject is one of great practical importance, and ought to be diligently studied by those who have extensive opportunities of observation.

As to the other two species of Rayer, the "*T. annularis*" and "*T. granulata*," they correspond to Willan's simple species, *P. scutulata*. Our limits prevent us from alluding more particularly to the characters of each; and we regret this the less, as we are ourselves quite bewildered in the meshes of incongruous narratives, and do not feel ourselves warranted to attempt the unravelling of them. Our readers, however, may receive considerable instruction from our review of Mr. Macilwain's treatise on *Porrigio*, in our Number for last April. Passing over the order of "*furunculous inflammations*," which have not usually been recognized as strictly cutaneous diseases, we come to that of the—

Papulous Inflammations—the "*papulæ*" of Willan. Both systems admit three species, viz. *strophulus*, *lichen*, and *prurigo*; but, as Rayer observes, "they might be reduced to two—*strophulus* appearing to be but a modification of *lichen*, in new-born infants and those at the breast." The itching, however, is never so considerable in the former as in the latter, although the skin of the child is naturally much more irritable than that of the adult. Our author follows very closely the descriptions given by Willan and Bateman; it is, therefore, unnecessary to dwell upon this order of cutaneous affections.

Before leaving it, we may repeat that it would have been more consistent with the principles of philosophic arrangement to treat of papulous, before pustulous and vesicular eruptions. Rayer ought to have followed his English guides in this particular. The next order is that of—

Tuberculous Inflammations. This order of Willan has been subjected to a most unmerciful pruning, two only of the original genera being retained, viz. *lupus* and *elephantiasis* (and only one form of it); and to these two, has been added, "*cancer or scirrhus of the skin*." The definition indeed of a tubercle is vague, and almost unintelligible; and perhaps we could not find a more satisfactory proof of the extreme difficulty of the classification of living phenomena than by referring to this department of our present inquiries. The genera of "*lupus*" and "*cancer*," though indisputably affections of the skin, may for any practical uses, be excluded from a treatise on cutaneous diseases; they are very rarely submitted to the inspection

of a physician, and the most modern surgical works have treated of them at great length: and with respect to the other genus, "elephantiasis of the Greeks," it was our intention to have discussed at some length the characters of this, as well as of the Arabian elephantiasis, or as it is called in the West Indies, the Barbadoes leg, and to have pointed out the difference between these two diseases, and also between them and the Jewish leprosy or leuce, a disease which has been so often confounded with them; for, indeed, on no one question of medical inquiry has there been so much discreditable ignorance displayed, and such astonishing absurdities committed, as in the histories of these affections: we had wished to have swept away some of the rubbish in which the subject has been involved; but for this we cannot find room at present; and, although interesting, it must be confessed that it is one on the whole rather of literary curiosity than of directly practical importance to the medical man. We shall only remark that in our opinion Rayer has not done well to separate the elephantiasis of the Arabs from all other diseases of the skin, and to have made a distinct section for it alone, on the ground of it being "a disease primarily foreign to, but which, at times, produces alterations of the skin." Is it primarily more foreign to the skin than boils and carbuncles are? We think not. The order of "squamous inflammations" follows. Rayer omits ichthyosis, "which has," he says—

"But small analogy with squamous diseases. Willan and Bateman have thought proper to place them in the same class. Ichthyosis, almost always congenital, or developed in the first few months after birth, is attended neither by sanguineous injection of the skin, morbid heat, itching, nor any other sign of inflammation. In lepra, psoriasis, and pityriasis, the production of the scales is always preceded by redness of the skin, which may be made apparent by removing them from its surface. In confluent and inveterate lichen, developed on the trunk or limbs, the skin may become brownish, and covered by innumerable scales, somewhat similar to those of slight ichthyosis; but this state is accompanied by insupportable itching, and preceded by papules. The simultaneous or ulterior development of similar elevations, upon some adjacent part of the skin already farinuous, will dissipate all doubts as to the nature of these obscure cases." 337.

Although correct in the main, these reasons do not appear to us quite sufficient to have warranted the expulsion of ichthyosis from the order of the squamæ: the utter absence of inflammatory action, or at least of something approaching to it during the early stages, is problematical; for the history of the disease has not been hitherto examined with sufficient accuracy.

The ninth and tenth orders need not detain us a moment, and we therefore proceed at once to the last or eleventh, in which are included several most incongruous affections; our business shall be, however, only with one set of them, which may be well called multiform (provided we are to adopt as the generic term, syphiloid disease, or syphilitic eruption) as there is scarcely a form of cutaneous disease which it does not assume. It appears sometimes as an exanthema, (roseola syphilitica,) characterised by broad patches of a coppery red colour, scattered over the trunk and limbs; sometimes as a papular, (lichen syphiliticus;) or as a pustular or tuberculo-pustular; and still more frequently as a squamous eruption (lepra syphilitica.) Now all these eruptions have one outward feature in common, a feature too not observed in other diseases, and which therefore serves to enable us very

generally to pronounce on the nature of the case; this feature is the coppery or violaceous red color which pervades and surrounds the cutaneous blotch, of whatever character the blotch may be; in addition to this feature, there is another, which though not so universal is so very commonly present, and so pathognomonic, that when it does occur, our diagnosis is rendered almost infallible: the papules, pustules, tubercles, and scaly spots, (for the remark is not applicable to the venereal exanthema) have all a tendency, when left to themselves, to terminate in ulcers, "the edges of which are irregular and sharp, while the bottom is unequal and of a greyish white colour." These different forms of eruption are not unfrequently seen on the same individual at the same time; or one form may be developed, as another fades away. The most frequent and the least equivocal form is unquestionably the leprous, and as it is of great importance that the disease be speedily recognized, we direct the attention of our readers to the following very accurate description of its appearances.

"The patches are ordinarily dry, flat, circular; from four to six lines in diameter, and of a *coppery red colour*. Each spot is announced by a small hard elevation, red or violaceous, which extends circularly till it reaches its fullest dimensions. These plates or patches, very distinct and separate from each other, are always of a copper tint when arrived at their highest degree of development. They scarcely exceed the level of the skin; their surfaces are, at first, as soft and smooth as the healthy skin; they afterwards become scaly or furfuraceous, but the copper colour always decides their syphilitic nature. Sometimes the centre is paler than the circumference; at times they are formed in circles or rings, in the centres of which the skin remains perfectly healthy; but still, the peculiar copper tint does not allow of their being confounded with lepra or psoriasis.

Left to themselves, these patches run on to ulceration, after the development of a small psyraceous pustule. The light scales which cover their surfaces become detached, and are replaced by others of greater thickness: a small crust is then formed, beneath which ulceration takes place, but rarely to any extent, and generally superficial." 268.

The pustular form of syphilitic eruption is not so uniform in its appearances as the leprous. The pustules may be either large or phlyzaceous, small or psydracious, or tuberculoid: the first of these varieties constitutes the "ecthyma syphiliticum," of some authors; and perhaps most of the cases of Willan's "ecthyma cachecticum," are in truth attributable to the action of the venereal, or of the mercurio-venereal poison, on an unhealthy constitution. After continuing for some days, these (the phlyzacious) pustules give issue to a purulent fluid, which concretes under the form of blackish-brown crusts, usually conical and surrounded by a copper-coloured areola; when these crusts fall off, there are observed either brownish spots, or small ulcers, or cicatrices of such ulcers, all presenting more or less the same hue. Not unfrequently numerous papulæ are intermixed with the pustules, and then we have a compound or papulo-pustular eruption. Our author's description of the tuberculoid form is good.

"*Syphiloid tubercles* are ordinarily observed on the alæ of the nose, commissures of the lips, on the forehead, genitals, &c. They are also seen on the limbs. These tubercles vary in size from that of a cassia-seed to that of an olive; they are round or ovoid, scattered or disposed in groups, and at times symmetrically arranged one after the other. Their livid or copper colour, contrasts singularly

with that of the surrounding healthy skin. Their surfaces are at first smooth and shining; but when they have been long neglected, they inflame and *ulcerate*. Among the ulcerations, some are covered by thick adherent crusts, frequently conical. When these become detached, the ulcer sometimes heals at its centre while it is spreading at its circumference; and if the patient is much debilitated, the ulceration acquires considerable dimensions. Tubercles may also terminate in *serpiginious* ulcers, healing on the one side, and spreading on the other. These deep and sinuous ulcers, spirally disposed, resemble ciphers, letters, segments of circles, entire rings, &c. the livid edges of which are sometimes surmounted by tubercles. After their cure, they leave indelible cicatrices on the skin, of a very irregular form." 271.

The syphilitic lichen is characterised by the eruption of papulæ, which soon acquire a coppery color, and which are usually surrounded with areolæ of the same hue. If neglected, these papulæ are apt to ulcerate, and "like other forms of syphilis, this eruption is successive in its development; and on the same subject, and sometimes on the same region, may be observed papules intact and ulcerated, and small circular cicatrices, having irregular edges, while their centres are depressed." Of all the forms of syphilitic eruption, the pustular and tubercular are the most serious, not only as indicating a more vitiated state of the constitution, but also as being much more difficult of cure, and requiring an especial nicety of discrimination in the treatment. As a general remark, they are made worse by severe courses of mercury, and almost inevitably, if there is induced a profuse salivation. The exhibition of small alterative doses, in conjunction with the use of sarsaparilla, a nutritious diet, and with change of air, is the most successful, as well as the safest practice to pursue. But this branch of the subject, although the most immediately and practically interesting, we have not space to discuss; our article having already exceeded the limits which we wished to prescribe to ourselves at starting. A third part at least of the volume remains unreviewed, although containing much curious as well as useful information; the nature of its contents may be gathered by an inspection of the synoptical table which we have given. Some may have thought that we have been too much of mere critical nosologists throughout this article, and may object that, scarcely one remark has been offered with respect to the treatment of any of the maladies which have passed under review. We have a reason for having acted so; and it is this. Rayer's treatise is as a whole, a work of classic excellence; it is valuable especially for the accurate descriptions of symptoms and of appearances, and for the minute attention to the diagnosis of cutaneous diseases; but the therapeutic portion is decidedly much inferior to the descriptive; and high though its general merits be, we should be wrong in withholding our opinion, that in its present form it is not all adapted to supersede Bateman's admirable Compendium. Perhaps with the exception of having pointed out, with greater earnestness, the efficacy of bloodletting in many forms of cutaneous disease, the author has made scarcely one valuable suggestion touching the employment of the most approved remedial means. We must not therefore consult this work alone, in guiding our practice in troublesome and perplexing cases, or we shall be grievously disappointed: Willan and Bateman are much better authorities. The translator might have done much, had he exerted himself to have remedied the defect to which we allude; but unfortunately he has confined himself to the mere school-boy occupation of substituting English

for the French words of the original; there is not a single note of the least value appended to any part of the volume; and even this is perhaps the very smallest blemish of the book; it has been most carelessly (we suppose from the excessive haste on the part of Mr. Dickinson to see his name in print) got up, and it is full of errors, which he may perhaps say, are merely typographical, but which we are not quite willing to admit as such; for not to mention the blunders in transcribing a few German words which occur here and there, what shall our well informed readers say of such classic terms as "febra urticata," "tinea annulare," and a score of such; or of a line like the following, "de febre a caneris flaviatilibus, et fragaria vescæ fructu." Almost every page presents such words as "veriola," "porrigo scutelata," "venerala," "visiculous," "flour of sulphur," and so forth. The formulas for the preparation of certain ointments and lotions are quite unique; for example—

"R. Protochl. mercury, ʒii.

Sugar, thus, āā ʒss. M. for fumigation."

An ointment for the itch is to be prepared thus:—

"R. Adip. ʒj.

Sulphur. ʒij.

Potassæ, ʒj. M. fi. ung.

Two frictions, of two ounces each, twice a day."

Pray is the potassa the caustic alkali? We pity the poor patient, if it is; we should think that the fate of Marsyas, when he was flayed by the wrathful god, was not much worse. Then for another specimen. ("Redwash Hospital, St. Louis.")

"R. Deutochl. mercury, ʒj.

Distilled water, ʒj.

Anchusa, q. s. M. ft. lotio."

A drachm of corrosive sublimate to a scruple of water? A moderately strong wash we suppose. Dr. Paris, in the next edition of his Pharmacologia, will do well to attend to these curiosities of the prescribing art. In the event of a second impression being at any future time called for, Mr. D. will do well to revive studiously and patiently the work which he has undertaken to introduce into English medical literature. Let him not be satisfied with giving a mere bald translation of Rayer's text; he should aspire to a more dignified avocation; and by comparing the sentiments of his author with those of domestic and of other continental writers, by abridging or altogether excluding some of the unnecessary details, and by supplying the deficiencies, (more particularly in reference to the treatment of skin diseases) he will not only do himself an essential good, but confer a practical benefit on the profession at large. As a guide and pattern for him to follow in his labours, we cordially recommend him to take Dr. Forbes, whose translation of Laennec we cannot praise too highly. A copious index is indispensably requisite in such a work as Rayer's.

TRANSLATION FROM THE INAUGURAL DISSERTATION OF *Carlo Francisco Joseph Bellingeri*, E. S. Agatha Derthonensi Philosophiæ et Medicinæ Doctoris, Amplissimi Medicorum Collegii Candidati.

THE physiological world has lately been distracted by a controversy on the nervous system. The discoveries which the world has attributed to Sir C. Bell have been snatched at by more than one envious hand, and the wreath has been torn, though it has not withered on his brow. We had hoped to have laid before our readers, upon this occasion, a careful, a candid, and unflinching examination of the claims of some of those who oppose Sir C. Bell. Circumstances delay the publication of the article till the Number of this Journal for January next. A contemporary has advocated, with much warmth and little temper, the right of Bellingeri to be considered the first who elicited and displayed the true functions of the fifth and seventh pair of nerves. With anxious, hurried, and impartial zeal, he has, almost at the same hour, introduced the candidate and chaired the victor. Yet the issue of the triumph *may* remind us of the humorous plate of Hogarth, in which the conqueror's conspicuous situation attracts to himself more weighty bludgeons and more numerous brickbats.

As Signor Bellingeri's claims are hotly urged, the best mode of arriving at a just appreciation of them, is to lay before the public a translation of the essay on which they have been founded. This we have now, through the kindness of a friend, the opportunity of doing. In our next, we shall discuss their nature and their value.

THE FUNCTIONS OF THE FIFTH AND SEVENTH PAIRS OF NERVES.

CHAPTER I.—ART. I. *The Use, Agreement, and Influx of the Major Portion of the Fifth Pair.*

1. Although, in entering upon a much controverted question, I cannot speak with absolute certainty, I shall have enough to adduce upon the ground of fair conjecture. We have, moreover, seen in the previous dissertation, that the fifth pair is distributed to a variety of parts, with entirely distinct uses. Some of these parts are subservient to sense and voluntary motion, some to involuntary or spontaneous action, others, again, to secretion—all, in fact, perform organic functions. With what actions, however, is the fifth pair engaged? Let us consult authority before we decide.

2. Galen has observed that a nerve of the fifth pair, which he designates by the name of the third conjugation, is assigned to the sense of touch and voluntary motion, and that branches of it are distributed throughout the mouth, and subservient to taste.

Willis remarked that the fifth pair attends upon the senses, as those of touch and taste; he maintained, also, that it performed motions, though involuntary or instructive; that it was influenced and excited by sympathy, and by the passions; he also plainly hinted, that the lachrymal branch of the ophthalmic was devoted to involuntary actions (or organic functions,) was

in a manner subservient to sight and smell, and modified the circulation of the blood in the face.

Vieussens likewise asserted that it was subservient to touch and taste; and that it was also of use in voluntary and involuntary motion, and in the expression of sympathy and passion.

Meckel declared that it expressed the feelings of the mind, and revealed morbid affections in the face; that it directed more of the sympathies of the head, trunk, and limbs; that it presided over the senses of touch and taste, and was even subservient to smell; that it attended upon sight and hearing; and sometimes contracted or dilated the larger bloodvessels and capillaries.

Soëmmering also observed that this pair expressed the sympathies and passions of the mind, and the morbid affections of the viscera. Bichat reckons the nerve of the fifth pair among the nerves of animal life, and transfers the ophthalmic ganglion to the nervous system of organic life. Gall observed that the nerve of the fifth pair is distributed to parts of voluntary motion, and also to parts which are by no means so; that it presides partly over ordinary sensation, as that of touch, partly over special, as that of taste; hence he proposed the term of the mixed pair. Boyer examined the physiology of the fifth pair more fully, for, according to him, it supplies motion to the occipito-frontal and supraciliary muscles, to all the muscles of the face, to the temporal, the pterygoids, the masseter, the muscles of the velum palati, those of the tongue, the mylo-hyoideus, the genio-hyoideus, and to the anterior belly of the digastric; but it supplies sense to the iris, the lachrymal gland, the conjunctiva, the pituitary membrane, the velum and glandular membrane of the palate, the gums, the membrane of the internal mouth, the teeth, the tongue, the tonsillary, maxillary, and sublingual glands, the integuments of the ears, temples, crown of the head, forehead, and the whole of the face.

3. Very numerous, therefore, and diversified are the functions which, in the opinion of these writers, the fifth pair performs. Reason, however, seems to convince us, that this pair eminently contributes to the organic life of the parts to which it is distributed.

4. And in the first place, in an anatomical point of view, its peculiar structure, so admirably adapted to nerves of organic life, the intertextural arrangement of its filaments, its frequent ganglia, the extraordinary number of its anastomoses, the occasionally increased volume of its branches—as we have observed with Boyer, in the trunk of this nerve, in the ciliaries, in the external nasal; and, with the anatomist Scarpa, in the posterior palatine, which constitutes its resemblance to the intercostal; its constant connexion with the arteries, which Bichat considers a distinct characteristic of the organic life of nerves—all these points are in favour of the opinion proposed. Perhaps an argument may also be drawn from its source; for it appears to rise almost entirely from the corpora olivaria, which are properly considered as ganglia.

5. The arguments derived from physiology are still more important. Being actually distributed to the iris, the lachrymal gland, the widely-expanded pituitary membrane of the nose, the maxillary, sphenoidal, and frontal sinuses, the teeth, the internal parts of the ears, all the salivary, the mucous, and the tonsillary glands, the pharynx, and the periosteum, it cannot but perform the functions of organic life. It is true, indeed, that it has refe-

rence to the muscles which are subservient to the will and the teguments; but I would have it observed that it is not branches of the fifth pair only which exist here, but that others are immediately added; whilst, for instance, it passes out above and beneath the orbit to the temples, and in the malar region, near the foramen menti, are not filaments of the seventh pair immediately superadded, forming, by a close anatomosis with the branches of the fifth, almost a single nerve? If, then, organic life exists solely where the branches of the fifth pair are exclusively found, as in the lachrymal, nasal, dental, and palatine branches, is it not probable, from its distribution to the muscles and integuments of the forehead, lips, nose, mouth, and entire face, that it attends merely upon (familiari) the organic life of these parts, while their animal life, as voluntary motion and animal sensation, depends on the superadded nerves? Undoubtedly, since the fifth pair supplies the organs of the senses, the organic part depends on this nerve, the animal on those particular nerves which relate to these organs. It is plain that the involuntary motion of the iris, that of the muscles of the internal ear, and the organic life of the pituitary membrane, are regulated by the fifth; yet the sense of smell depends on the first pair, that of sight on the optic, and that of hearing on the acoustic: it seems therefore to follow that both the voluntary motion of the muscles of the face, and the animal sense of touch, depend on the seventh. For, since the branches of the fifth pair exclusively supply the velum palati, with its muscles, and the pharynx, their motion is almost *entirely* removed from the control of the will.

Let us moreover observe, with Gall, that the nerve of the fifth pair is more evolved, in the case of infants newly-born, than any other nerve of the head; and, whereas, in the rest of the animals, a proportion is kept up more than in man, the fifth pair is more remarkable for its thickness. But the life of the fœtus is organic; the life of brutes, also approaches nearer in the face to the organic than that of man. Physiology therefore convinces us that the fifth pair is subservient to organic life.

6. That the fifth pair is principally devoted to organic life is proved, moreover, by actual cases of pathology. It is matter of fact that, in neuralgia, the infra-orbital branch of the face is divided, and no paralysis of the muscles ensues. The same conclusion is perhaps deducible from the case of the monster described by Lawrence; in which the brain was almost entirely wanting, and the annular protuberance was replaced by a tumor, from which proceeded only the fifth, sixth, eighth, and ninth pair; the subject lived four days, and took food. Yet it would be fairly inferred that the monster lived an organic rather than a really animal life, from the entire absence of the principal organs which attend upon the latter.

7. Meanwhile, whilst we are proving that the fifth pair attends principally upon organic life, it is also plain that animal life must consequently depend on the same pair, for, upon injury of the organic mode of existence in any part, the animal functions are also of necessity interrupted. Upon this principle we explain the following case:—

Mussano Joseph Antonius, 23 years of age, (an agriculturist of Bibia,) of the sanguine temperament, and of a robust habit, was seized, from seeing an epileptic woman several times, with a severe mental affection, producing disturbed, restless, and terrific sleep; some months afterwards he experienced a heavy pain in the right occipital region, which was followed in a few days

by paralysis on the same side of the face. He entered St. John's Hospital a month and half after the commencement of the disease, when we observed the following symptoms. There were distortions of the left side of the mouth; pain above and beneath the orbit about the proper foramina, also at the os malæ, and near the foramen menti on the right side; paralysis of the frontal and supraciliary muscles, the orbicularis palpebrarum, the incisor muscles, the canine, the zygomatic, the triangular, and the quadratus menti, and of the orbicularis labiorum on the right side; meanwhile, the motions of the temporal, masseter, and buccinator muscles, and of the tongue, was unimpaired; the deglutition was also undisturbed; the senses of hearing and sight were uninjured; the motion of the iris was perfect in the same part, as also that of the smell in both nostrils, as we proved by experiment. In the mean time, however, there was a diminished sense of titillation in the right nostril, on taking some pungent snuff; and a slight effusion of tears from the right eye; the same kind of snuff being taken in the left nostril, there was greater irritation, and a copious discharge of tears from the left eye; upon stitulating the nostrils with foreign bodies, sternutation ensued on the left side, but none on the right. The sense of taste was considerably impaired and diminished in the right side of the tongue; that of touch was also much obscured in the integuments of the same side of the face. There was also pain in the right scapula. We learn from this case that motion was withdrawn from those muscles, which are supplied by the portio major of the fifth pair, whilst it remained in those which are supplied by the portio minor; that the organic sense of the pituitary membrane was diminished, that its sympathy with the intercostal and lacrymal (nerves) was diminished and almost obliterated; and that the senses of taste and touch were injured, whilst those of sight, hearing, and smell were unaffected.

7. It is not, however, merely over the organic life of parts that the fifth pair presides, but it also serves to express the involuntary passions and sympathies. The passions of the mind are wonderfully expressed in the face, principally by the branches of the fifth pair. Joy, for instance, is observed in the regular expansion of the frontal muscle, though by a peculiar separation of the muscles of the lips and of the orbicularis oris, by the brightness of the eye, and the natural animated colour of the face, and sometimes, when it is excessive, by a flow of tears. In sorrow, the same branches of nerves are affected, but in an entirely different way; thus the frontal nerves of the fifth, the lacrymal, and the insertions of the infra-orbital in the muscles of the nose and lips express sorrow, and also the branches of the inferior maxillary in the muscles of the chin; the eyes meanwhile droop and are sad, the face is pale and of a dull livid colour.

* * * * *

37. It follows from what has been hitherto said that, with regard to the senses, a distinction is to be made between those of touch and smell, and between organic and animal taste. These senses, so far as they depend on instinct, are referred to organic life; hence they have been denied to no class of animals, and are perfect almost from the period of birth; for it is by these senses that the animals provide for themselves, and preserve their existence; and these senses also act by their connexion with nerves of organic life only, as appears in worms, and in the monster described by Fauvel and by Mery; but animal touch, smell, and taste are performed by

distinct nerves, which transmit their sensation to the brain. It is moreover agreeable to the economy of Nature, that the natural or organic senses should be discharged also by the nerves of organic life, but that the animal senses should depend on a distinct class of nerves. The fifth pair, therefore, in our case, presides over the natural or organic senses; but the animal senses, which are found in the same organs to which the fifth is distributed, depend on superadded nerves. I shall therefore decide that the fifth pair is a sentient nerve, and motory of organic life in the head. What I have said generally of the fifth pair, is to be understood only of the portio major of it.

ART. II. *The Use of the Portio Minor of the Fifth Pair.*

38. The portio minor of the fifth pair has an entirely different origin, course, and structure from the portio major, and is inserted by its proper shoots into the temporal, masseter, and buccinator muscles, the external and internal pterygoids, the orbicularis labiorum, the elevator anguli oris, and the triangularis menti. Palletta asserted that this portio minor performed voluntary motions, and was affected, in trismus, primarily or by sympathy. Since, however, it is to a certain extent subservient, from its insertions, to the taking of food, to deglutition, and especially to mastication, I doubt whether its functions are confined to voluntary motion. Willis observed some time ago—"The taking of food into the mouth is the first and earliest employment of every animal, and is indeed taught by natural instinct prior to all knowledge of the brain;" whence it is plain, that, since the portio minor is engaged in performing these functions, its motions are not always dependant on the will, but sometimes on instinct, as in the infant, who performs all these motions perfectly as soon as he is born. This portion is therefore influenced sometimes by the will, sometimes independently of the will, and by mere instinct. We undoubtedly move all the muscles, which are supplied by the portio minor, voluntarily and at our pleasure. It is plain, however, that this voluntary motion of the muscles depends solely on the portio minor of the fifth, and not on the seventh, or the facial nerve, which is elsewhere united with its branches, from the fact that the portio minor exclusively supplies branches to the fleshy substance of the temporal muscle, and particularly to the pterygoids, without any branches of the facial, and yet that those muscles are under the control of the will; besides, in paralysis of the seventh pair, as will be seen in a case presently to be given, these muscles were actuated by the will. The portio minor therefore relates to the nerves of animal life, and indeed to the motor nerves; for it in no case presides over the senses, and, if its office be considered, it should be termed the nerve of mastication.

Since, therefore, the portio minor is altogether in itself a nerve of animal life, Nature has assigned its origin distinct from that of the major, and, as it is a motor nerve, it arises from the peduncles of the cerebellum. It is therefore evident with what propriety Palletta observed, from anatomical deduction, and from a survey of their different origin, structure, and course, that the crotaphitic and buccinator nerves are distinct from the fifth pair, for their physiological functions also prove that the portio minor is distinct from the major.

39. Having, however, proved that this portio minor performs distinct voluntary motions, we have still to enquire why, in certain cases, it influences the muscles which it supplies, involuntarily or instinctively. This is also shewn by anatomical proof; we have seen, in the preceding dissertation, that the portio minor of the fifth is for the most part intimately connected, at its emergence from the oval foramen, by the gangliform plexus with the inferior maxillary; and, moreover, that almost all the branches of the portio minor receive roots or filaments from the roots of the inferior maxillary; the portio minor is therefore, in its proper ramifications, a nerve composed of its own filaments, and of those of the inferior maxillary: we need not wonder, then, if it perform, generally, voluntary and sometimes involuntary actions, which, however, it effects not by its proper filaments, but by those which proceed from the inferior maxillary, which I think I have already shewn to preside over organic life, and perform involuntary motions. But, besides these latter motions, which the portio minor sometimes produces, it presides in some parts over organic functions, as is proved by the buccinator branch, which is connected by filaments with the duct of Steno, and the buccal glands.

There are then muscles which perform mixed motions, sometimes voluntary, sometimes involuntary; there are also nerves, though these either consist of filaments of different nerves collected into one fasciculus, or the filaments constituting a single nerve have a different origin in the brain.

CHAPTER II.—*The Physiology of the Seventh Pair, or the Facial Nerve.*

40. The remarks I am about to make upon the use of the seventh pair, obviously arise from what I have already said, perhaps too fully, respecting the fifth. Let us first explain its physiology; and begin by adducing the words of Rhazes: he has well observed—"It is the fifth pair, (hitherto designated by the single name of the seventh,) by the one part of which occurs the sense of hearing, and by the other are moved the muscles which affect the face." Willis asserted that this nerve performed certain motions, especially those of the passions; that it was affected sympathetically by the acoustic, and expressed the sympathies which occur between the acoustic, the external ear, the eyelids, and the organs of voice—the pharynx, the tongue, and the lips: that it presided over the motions more than over the senses; that it was however subservient to the sense of hearing; he observes, "another (the facial) nerve supplies certain requisites, by which that act (hearing) is more completely performed." Winslow called the facial nerve the small sympathetic. Meckel however affirmed that this nerve was affected by grief; and communicated its proper affection to the diaphragm by the cervical (nerves;) that it contracted or relaxed the blood-vessels in affections of the mind; that it performed the sympathy which exists between the lips and the whole of the body in the act of kissing; that it presided over the exquisite sensibility of the lips. Soëmmering said that it expressed laughter in the face, weeping and anger, paleness and redness of the face, and he explained, by means of the facial nerve, the agreement of the teeth with the head, ear, and muscles of the face; and the sympathy of hearing with the eyelids. Gall speaks to the same effect. Bichat reckoned the facial among the nerves of animal life. Boyer said that it imparted motion to the

muscles of the stapes, the malleus, and those of the external ear, to the stylo-hyoideus, to the posterior belly of the digastricus, to almost all the muscles of the face, and to the colli-cutaneus. He said that it also presided over sense in the cutis of the head, in the integuments of the ears, of the temples, of the face, and of the anterior and posterior part of the collum.

41. The anatomical structure of the facial nerve suggests to us, that it presides especially over the animal functions in the head, face, and neck, that is, over the animal sense and voluntary motion. It scarcely any where, indeed, forms ganglia; it presents a similar structure to that of the other nerves of animal life, merely constituting remarkable plexuses and frequent anastomoses; it is almost exclusively inserted in the skin and muscles; it should, therefore, be called the cutaneo-muscular of the head and neck. An argument may also, perhaps, be derived from its origin; we see it, in fact, arising principally from the medullary fasciæ, from the corpora restiforma, and from some filaments proceeding from the corpora olivaria. Since then, it chiefly arises from processes of the cerebrum and cerebellum, we infer that it is subservient to sense and animal motion.

42. Physiology also teaches, that the facial nerve is especially devoted to the animal functions. Since, indeed, it supplies the cutis of the head, the face, and the neck, it is rendered very probable, from what we have said on the fifth, that it expresses animal sense; but that, being distributed to all the muscles of the external head and external ears—to almost all those of the face, excepting the temporal, to the stylo-hyoideus, the posteriori digastricus, and colli-cutaneus, it performs animal motion. It should, therefore, be termed from its office, the sentient and motor animal nerve. Its function in the internus of the ears and the parotid we shall examine hereafter.

43. The following is a case of the pathology of the seventh pair.—A patient was lying at St. John's Hospital, under the care of Professor Geri, having been affected for a long time with an inflammatory tumor behind the right ear, which had extended both above and below the mastoid process, so as to compress the facial nerve, at its point of exit from the stylo-mastoid foramen; such was the decided opinion of the Professor, and of Drs. Gallo and Riberi. Meantime, the patient presented almost entire paralysis of the muscles of the right side of the face, and distortion of the left side of the mouth. There was, in fact, complete paralysis of the frontal muscle, the supraciliary, the orbicularis palpebrarum, the elevator alæ nasi, and labii superioris, the canines zygomaticus, the right side of the orbicularis labiorum, the triangularis and quadratus menti, and colli-cutaneus. The motion of the temporal, masseter, buccinator, and pterygoid muscles, was perfect; of the digastricus we could form no opinion. The motion of the ball of the eye and of the upper eyelid was unimpeded; the vision of the right eye was, however, a little injured; the tongue, also was moved with some difficulty, yet was the taste proved to be unaffected on either side of the tongue; the sense of touch was also uninjured in the face, the hearing was considerably impaired in the right ear, but the abscess had opened in the external ear. The patient died in about two months. An effusion of pus was found in the cavity of the tympanum, contained in the aqueduct of Fallopius, and compressing the facial nerve in its course; there was no pus or trace of inflammation about the stylo-mastoid foramen after death; but marks of recent in-

inflammation and suppuration in the right lobe of the cerebellum; the fibres and trunk of the fifth pair were uninjured.

As often as the facial nerve is affected with neuralgia, there almost always occurs a spasmodic and convulsive affection of the muscles of the face and neck, as will appear from the following dissertation.

44. The results, also, of *anatomy* shew much more distinctly the physiological use of the seventh pair. Cuvier observes that the facial nerve is invariably small in birds, from their want of lips, a muscular mouth, and almost a face; since there is no sensation and little mobility, there is consequently a very small nerve. On the other hand, the nerve of the fifth pair is observed to be fully developed in birds. I have myself remarked that, in the rabbit, the branches of the facial nerve are very small, but that the branches of the infra-orbital of the fifth are larger and conspicuous; yet, in such creatures, few animal, though many organic, functions are performed in the face.

45. We now proved, by *experiment* on the rabbit, that the seventh pair is subservient to sense and animal motion. We divided the seventh pair, in its course near the parotid, which was followed by paralysis of the muscles of the eyelids, of the upper and lower lip on the same side. On dividing the seventh pair on both sides, nearly in the same place, there was entire paralysis of the eyelids, and of the upper and lower lip; the rabbit still moved the external ears, drew down the lower jaw, and protruded the tongue; the sense of touch appeared to be considerably affected in the face, for, when its hair was plucked, it gave no signs of sensation.

46. Since, then, the seventh pair is subservient to animal life, it produces animal sense in the face and voluntary motion. Since, moreover, it supplies animal sense in the face, branches of the seventh are distributed from this source, together with branches of the fifth, in every part of the head, face, and neck, throughout the skin; and they exist in greater abundance, or more superficially, where the animal touch is more exquisite; thus the seventh forms frequent anastomoses with the subcutanei malarum of the fifth; the shoots of the facial are conspicuous at the lips, and exists in great numbers all over the skin of the neck, imparting to it an exquisite sense, from which the excitement is most easily perceived in these parts. And we have already observed that it presides over the sense of taste, by the chorda tympani, or its lingual branch.

47. But, in the first place, the seventh pair performs almost all the voluntary motions in the face; it moves the muscles of the forehead, the orbicularis palpebrarum; some muscles of the nose evidently, others obscurely, in man, but all of them manifestly in some species of animals, as in the rabbit; also the muscles of the labia, the buccinator, and masseter; all the muscles of the external ear in most animals, if not in man; the occipital, and, at length, the stylo-hyoideus, the mylo-hyoideus, the posterior belly of the digastricus, and the colli-cutaneus, all of which are under the control of the will. But through its lingual branch, it contributes not merely to the sense of taste, but also to the voluntary motion of the tongue, as is proved by the case already given, in which we observed that the voluntary motion was in some degree impeded.

48. Nor is its function confined to the senses and voluntary motions, but it also performs the animal sympathies. By this term, I understand those

sympathies which depend on animal sensitiveness and contractility, through the interference of the brain, which are performed with consciousness, and may be prevented by reluctance. Now there are many sympathies which occur between the sense of hearing, the external ear, the eye-lids, the tongue, the lips, the larynx, the head, and limbs, through the facial nerve, and its anastomoses with other nerves. Those sympathies, indeed, between the acoustic and facial nerves would be better explained, if the shoot, described by Meckel and Bertinus were a constant one, which enters the interior parts of the ear, and seems to form a part of the acoustic. Moreover, the sympathy between the sense of hearing and the external ear is manifest in the brutes which move their ears voluntarily; for, upon any unusual sound, they erect their ears, and put them, as it were upon the watch. In man, also, the sympathy of hearing with the eyelids is evident, for we open our eyelids at the slightest sound, and prevent their closing; upon the occurrence of any violent or sudden noise, we almost unconsciously close our eyelids, although we are able to keep them open when accustomed to it, or advised to do so. There is sympathy with the internal and external organs of speech, as the larynx, the tongue, the lips; thus, on hearing a loud noise, fearless animals bellow, and utter terrific howls—the timid, on the contrary, retire in silence; while listening to pleasing sounds, even in the very act, we suppress our voice—we even direct the tone of our voice by the sense of hearing. Since, then, such sympathy exists between the voice and the hearing, we see also that the seventh pair forms an anastomosis with the laryngeal of the par vagum. And from such an anastomosis, we understand how the voice also is obedient to the will; for the voice is an action sometimes voluntary, sometimes instinctive; the infant cries as soon as born. How far does the voluntary depend on the branch of the facial nerve—how far from instinct, arising from the laryngeal branch of the pneumo-gastricus? What limit can be set to the agreement of the tongue with the ear? Thus, it is by hearing we learn fitly to apply our words, whilst the deaf person is also dumb: but the sympathy of the ear and tongue is best explained by the chorda tympani, which is principally a branch of the facial, inserted in the lingual. Nor is the sympathy merely between the hearing and the tongue, but also with the lips and muscles of the mouth; these, consequently, act in utterance, in talking, in singing, and we pronounce all the vowels and labials.

There is also a sympathy of the ear with the whole of the head, and the muscles which move the head; hence, when we hear a slight sound, and are listening attentively, we incline the head, and approach towards the sound—from a louder noise we, as it were instinctively, move away and avert the head. Those animal sympathies which are performed by previous sense and subsequent motion, are best explained by the anastomoses of the facial nerve with the accessory of Willis and the cervicals. By the connexion with the cervicals, we also learn, to a certain extent, how it is that the limbs are variously affected by the sense of hearing; hence, upon hearing an unusual noise, both man and animals attempt voluntarily and immediately to escape; or, on perceiving a loud and violent noise, the man is alarmed, panic-struck, and stands still—if a pleasant and agreeable sound, he keeps his limbs at rest. The deaf man also expresses, by the better signification of gesticulation, what he cannot utter, and supplies the defect of

his tongue with his hands, and the whole of the upper part. The seventh pair having also anastomosed with the cervical, the sympathy of the ear with the lower limbs is in some degree manifest; hence, the soldier's march is directed by sound, and dancers perform their movements. And thus we see the animal sympathy of the limbs and of the whole body with the face; by gentle tickling of the skin, especially at the soles of the feet and in the palm of the hand, laughing is excited. By these unions with the cervical it cherishes its own sympathy and that which it has with the diaphragm, which is consequently moved in various modes of utterance, in talking, and especially in singing.

49. Besides the animal sympathies, it expresses also the feigned passions of the mind, which consist solely in various movements of the muscles of the face, eyes, and head, in the position of the whole body, in changes of voice, and the utterance of speech. Thus it is with anger, love, joy, sorrow, humility, pride, dignity, which we wholly or in part affect, as is frequently done by actors; and it is with this nerve especially that they enact their buffoonery and provoke laughter. For laughter is also produced by this nerve; and, since there is considerable sympathy between the facial and the acoustic, we are induced to laugh principally through hearing—frequently, also, by animal touch, and sometimes necessarily by sight. Laughter, however, is never produced by the senses of smell, taste, and ordinary touch. The mind is always affected in laughter actively or passively; hence, man is almost exclusively gifted with this faculty.

50. Nor are the motions enumerated the only ones produced by the seventh pair, for, since it is subservient to speech and mastication, it consequently actuates the organs both of voice and of deglutition. For, through the stylo-hyoideus branch, and the intervention of the stylo-hyoideus and mylo-hyoideus muscles, it raises the larynx in deglutition and in speech; and, through the digastricus, it depresses the lower jaw in mastication, in singing, and in groaning. Since, moreover, those muscles are also moved involuntarily, as is seen in the deglutition, voice, and yawning of an infant, it follows that filaments, also, of the glosso-pharyngeal are supplied to these muscles, and the glosso-pharyngeal and facial nerves are united together by a remarkable anastomosis, so as to connect whatsoever there is of the voluntary and involuntary in deglutition and speech.

51. We have now, therefore, seen that the seventh pair attends principally on animal actions; if, however, any one should object, that it presides over the involuntary motion in the internal ear, let him refer to our remarks on the fifth pair; let him also observe that it there forms a ganglion, as occurs in the ciliary nerves; since, however, it gives some remarkable branches, also, to the parotid, there will always be a difficulty respecting its subserviency to involuntary motion, and, in some instances, to organic life. Besides, it undoubtedly subserves organic life, since it supplies many filaments to the mastoid cellules, to the membrana tympani, to the longer leg of the malleus, about the foramen jugulare, and to the muscles inserted into the Eustachian tube. But I would observe that the seventh pair is not to be considered as a single nerve, but as consisting of two portions, a major, and a minor discovered by Wrisberg, which has a distinct origin, structure, and a course separate from the portio major. I should, therefore, suspect, that a few of the involuntary actions performed by this seventh pair depend on

this portio minor; which would perhaps be more evident if its distributions were understood. In fact, from knowing the distribution of the portio minor of the fifth, we have shewn that the actions it performs are different from those of the portio major; for the minor is subservient to the will, but not the major. Moreover, we can conclude to a certain extent, from conjecture, that the portio minor of the facial is subservient to organic functions; for its filaments appear to rise partly from the substance of the pons varolii, partly from the corpora olivaria, near the origin of the glosso-pharyngeal; but we have already given our opinion that the nervous filaments which rise from the corpora olivaria subserve organic life. I therefore consider that, as the portio major of the fifth is subservient to organic, while its portio minor is devoted to animal life,—so, contrariwise, the portio major of the seventh attends on the animal, and the portio minor on organic life: which being admitted, I will also grant that the muscles of the internal ear are moved by filaments of the portio minor of the facial nerve. Since then the origin and structure are different, and the office of the portio minor of the fifth and seventh pairs distinct from the portio major of each, I fairly consider that each portion constitutes a distinct pair of nerves.

52. We therefore conclude that the facial nerve performs almost all the voluntary motions in the head, presides over animal sense in the face and neck, produces laughter, expresses the feigned affections of the mind, and accomplishes the animal sympathies; hence we also understand why its branches are connected together, and with neighbouring nerves, by frequent anastomoses, as seen by anatomy. We conclude that it acts in mastication, deglutition, voice, speech, singing, and, like the fifth, constitutes a part of all the organic senses; it supplies branches to the internal and external ears, defends the eyes by the eyelids, enters the inferior nostrils, enriches the tongue with a remarkable branch, furnishes the sense of animal touch on the skin, and is subservient every where in these parts to the functions of animal life.

And here I will stop, having spoken too much at large with reference to my ability, but briefly when we consider the wonderful work of the Creator; for in the latter point of view, there would be no limit to our remarks.

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Nor is the division of the branches of the fifth pair attended by paralysis of the muscles of the face, or by convulsive trismus, as appears from numerous cases, and from the clear and decisive testimony of Thouret. We accordingly observed, in our physiological remarks, that the portio major of the fifth pair was not subservient to voluntary motion; neither is it attended by atrophy of the parts, for the nerves of organic life appear to perform their peculiar functions partly without the influx of the brain, the medulla oblongata, and spinalis. Allowing, however, that the influx of the brain or marrow were necessary, there is still some communication kept up with these parts by the anastomosing filaments of the infra trochlearis nasalis, and the subcutaneous malæ.

30. Should it be made to appear that neuralgia has attacked the seventh pair, the division of the trunk or its branches is, in my opinion, never to be attempted: I say of the trunk, because, as Langenbeck observes, there is danger of injuring the neighbouring carotid; neither the trunk, indeed, nor the branches should be divided, for it would infallibly be followed by paralysis of very many of the muscles of the face, in respect of voluntary motion.

Jackson says that he divided the facial nerve; but in what part, and with what effect, is not stated. Langenbeck asserts that the zygomatic and facial branches of the seventh pair may be safely divided, but without affording any proof of it. I have, however, shewn by experiment on the rabbit, that voluntary motion ceased, and that the sense of touch was evidently injured in the face, on wounding the facial nerve near the parotid; and in the pathological case of the seventh pair, it was followed by paralysis of the muscles of the forehead, of the lips, and of the mouth. For the seventh pair being a nerve of animal life, its direct communication with the brain is as indispensable for the performance of its proper functions, as in cases of the rest.

I would it were in our power to remove this malady more frequently and more effectually, by careful examination of the affection, and by rigorous investigation of the means we have enumerated.

WORKS ON PATHOLOGICAL ANATOMY.

- I. PRINCIPLES AND ILLUSTRATIONS OF MORBID ANATOMY, &c. &c. By *J. Hope*, M.D., F.R.S., Physician to the St. Mary-le-bone Infirmary, &c. Part XII. July, 1834.
- II. ILLUSTRATIONS OF THE ELEMENTARY FORMS OF DISEASE. BY *Robert Carswell*, M.D. Professor of Pathological Anatomy in the University of London, &c. &c. Fasciculus Sixth. Hæmorrhage.

THE works before us are approaching their completion; the first, indeed, has reached it. The twelfth and last fasciculus of Dr. Hope's Illustrations of Morbid Anatomy, renders the whole a consistent treatise, displaying the lesions of the various organs, and presenting in a cheap and a portable form that kind and that amount of knowledge which is now indispensable for the surgeon and physician.

It would be idle to dwell on the benefits that have accrued, and must yet result from the due cultivation of that science which dissects disease—which unravels its processes and explains its history—which tells us what to dread and what to combat, when to act and when to stop—and which confers on medicine all that it can have of exactness and of certainty. We have said more than once upon former occasions, that *we* do not anticipate ultimate evil from the general study of morbid anatomy. In lieu of entertaining the opinion that that study has already gone too far, we are confident that it has not gone far enough. A little knowledge in science is a dangerous thing, because it leads to theory—a great deal lays the airy phantom that was raised, because it is productive of exactness. Look at the condition of medicine formerly, and regard it now. A century ago it was a thing of nostrums and tradition—aphorisms and precepts founded on empirical observation debased the mind and directed the hand of the practitioner of physic—and on more than one occasion, the progress of truth has been opposed by the buckler of ancient dogmatism and of consecrated error.* Now re-

* The introduction of lithotomy was long delayed, and its value when adopt-

medies are directed against actual conditions—their actions on peculiar textures and on morbid processes are tested by experiment, and rated by experience—and the surgeon or physician wields against an enemy he knows, weapons which he understands. But we need not pursue the apology or the praise of morbid anatomy. It is enough for us, and for the practical portion of the argument, that the cultivation of it *must* proceed, and that those who aspire to possess even the current information of the day, must, willing or unwilling, be familiar with its facts.

The progress that has been made in this department is most gratifying. The work of Dr. Baillie was deemed a splendid effort, and no doubt at the time when it appeared it was so. Yet compare his brief notice of morbid alterations with the careful, laborious, and accurate investigations of the best pathologists of the present day. The advance has indeed been a giant's stride.

We hail the publication and diffusion of the works of Dr. Hope and Dr. Carswell, with feelings of deep satisfaction. They will carry the spirit of observation and research, and convey the results of labour and of thought to the surgeon of the distant and the quiet village, as well as to the busy hospital-physician. The former sees, with the assistance of lithography, diseases which had otherwise never met his eye; and the latter is stimulated to fresh enquiry and to some minute investigation, in order to confirm or to confute opinions. But we cannot permit ourselves to indulge any further in a strain of general remark, and we proceed at once to discuss the prover which fills our manger.

1. Dr. Hope's fasciculus is devoted to diseases of the brain and spinal chord. He remarks, with justice, that much as has been done in investigating the morbid anatomy of these organs, our knowledge is yet very far from satisfactory; symptoms occurring without definite corresponding lesions, and varieties of change of structure being unattended with similar varieties of symptoms. Dr. Hope has not depicted all the morbid alterations that are actually presented, for some, as induration and slight degrees of softening are incapable of just delineation. For reasons which we need not particularly notice, he confines himself to the description and the representation of the more important genera of disease, and treats in successive order of inflammation of the membranes and substance of the brain—softening of the latter—suppuration, abscess, and ulcer—induration—apoplexy—hypertrophy, atrophy, and anæmia of the brain and spinal chord—tubercle, scirrhus, encephaloid, fatty, fibrous, cartilaginous, and osseous productions, and hydatids. We must exercise our judgment in disposing of these various subjects. Dr. Hope's abridgement must be further abridged.

INFLAMMATION OF THE MEMBRANES AND SUBSTANCE OF THE BRAIN.

Meningitis is the term which is applied to inflammation of the membranes in general: arachnitis is appropriated to that of the arachnoid: and sub-arachnoid meningitis implies inflammation of the sub-arachnoid cellular tissue and the pia mater.

"The dura mater is less frequently inflamed than the other membranes, and its external or fibrous, less frequently than its arachnoid layer. Its fibrous layer, in fact, is seldom inflamed, except from external injuries. In several cases of fracture of the skull, and in some of injury of the scalp alone, I have found pus,

ed, was at first debased, by the servile submission to the Hippocratic dogma, that membranous parts should not be cut.

either liquid or of pasty consistence, between the bone and the dura mater, and adhering to both. The bone was usually discoloured, and presented a zone of redness around the purulent deposition; the dura mater exhibited a corresponding zone, and its arachnoid surface was vascular, had lost its polish, and appeared thickened. In such cases the disease is rarely more than a few inches in extent, corresponding with the external injury." 278.

We think that inflammation of the external surface of the dura mater is more frequent, and sometimes more extensive, after injuries of the head than Dr. Hope would appear to suppose. Most of us remember the numerous cases of suppuration on the dura mater detailed by Mr. Pott; and many have been surprised at his remarkable examples of success from the operation of trephining. Since the days of that able and eloquent surgeon, a better system of management and treatment have materially diminished the number of instances of suppuration on the dura mater. Yet still it is not an unfrequent consequence of scalp-wounds and of fractures of the cranium. We have seen such suppuration occupy the greater part of the surface of a hemisphere, and extend to near the basis of the skull. There is a circumstance connected with this kind of suppuration, which would seem to have escaped the notice of our author, but to which Sir B. Brodie has directed particular attention. It is this:—When suppuration has occurred *on* the dura mater, inflammation and suppuration generally occur, as a consequence, *under* it. Thus, a person receives a scalp-wound—suppuration ensues upon the bone, and follows, in succession, between it and the dura mater, and between the latter and the arachnoid covering the pia mater, or even beneath the arachnoid itself. A knowledge of this fact is essential to the surgeon.

Inflammation of the arachnoid layer of the dura mater is very uncommon. It is usually partial, but sometimes it is general, and the base is then the part last affected. The ramiform vascularity of its commencement may advance to uniform redness, and to effusion of serum, of lymph, or of pus.

In inflammation of the arachnoid, little or no vascularity is usually noticed after death, but sometimes its vessels are finely injected. The most constant change is, a degree of milky or opalescent opacity, attended, after a time, with slight thickening and increased consistence and tenacity, so that the membrane readily admits of being peeled off from the pia mater. The vertex and the base are the parts at which these changes are most common, the whole of the membrane being rarely affected. When the arachnoid is inflamed the cellular tissue beneath it almost always participates in the affection. Serous effusion into the cavity of the arachnoid, and into the sub-arachnoid cellular membrane, and inflammatory injection of the pia mater, present no peculiarities that need detain us.

A frequent appearance is partial or general thickening of the arachnoid, and a milky cloudiness on the surface of the brain, partly occasioned by the thickening of the membrane, partly dependent on effusion of serum, or even of gelatinous lymph beneath it. Few bodies of persons advanced in life fail to exhibit more or less of these appearances. They are such as may, and frequently must arise from chronic inflammatory action. Yet we see them under circumstances so varied and so opposite, where cerebral symptoms have been present, and have not existed, that they seem to resemble the alterations in the coats of the arteries, and other changes incidental to old age, the inflammatory origin of which is problematical.

Obliteration of the sinuses of the dura mater is occasionally witnessed. It is supposed to arise from inflammation of those vessels. They are found choked up (and the great longitudinal sinus displays the fact in an eminent degree) with coagulum of blood, which strongly adheres to their parietes. In the centre of the coagulum is a semi-concrete puriform matter. Wherever the coagulum appears most recent, this central softening does not exist.

We have noticed this appearance on several occasions, and, however disposed

to respect the authority which attributes its origin to inflammation, we doubt if that opinion is in all cases correct. Certainly we have observed this alteration in cases where no symptoms of phlebitis, nor even of material cerebral disturbance, were presented. It has seemed to us to occur in individuals who were long in dying, and we think that it resembles the polypi, with central softening, in the heart, which have also been remarked in cases where the final struggle was protracted.

However this may be, the consequences of obliteration of the sinuses of the dura mater are, not only stagnation of the blood in the cerebral veins, but exhalation of serum, and even of blood, into the cavity of the arachnoid, extensive ecchymoses in various parts, extravasations of blood in the sub-arachnoid cellular tissue, with softening of the cerebral tissue of the convolutions; rupture of vessels in the substance of the brain, and apoplectic coagula in the midst of the hemispheres. All these different effects result, without doubt, from differences in the seat and extent of the venous obstruction, and still more, perhaps, from the rapidity with which the sinuses are obliterated.

In describing inflammation of the substance of the brain, Dr. Hope successively passes in review its natural appearance—congestion—and genuine inflammation. To the former we need not allude, as words convey imperfectly a knowledge of those natural and standard features, which frequent opportunities of dissection can alone render familiar. Yet we may observe, that the vascularity of infancy and early youth confers upon the brain a pinkish hue, while the weakened circulation of old age is productive of a yellowish tint. But the diagnosis of congestion and of inflammation is important, and induces us to notice the statements of our author. And, first of cerebral congestion.

This is augmented by diseases attended with obstruction to the return of the blood from the head, such as asthma—asphyxia—convulsions, &c. Hypertrophy of the left ventricle of the heart occasions it, by producing a preternatural determination to the brain. If the head is placed in a dependent position after death, gravitation of the blood may occasion very considerable injection, and even uniform redness; and the latter may occur, if dissection is delayed till putrefaction has commenced. Cerebral congestion is diminished by opening the chest before the head, the blood then draining off by the jugular veins. Exposure of the stripped surface or sections of the brain to the air is well known to augment its redness, by the influence of the atmosphere upon the blood. We subjoin Dr. Hope's description of congestion.

“The veins on the surface are preternaturally turgid, and their minute ramifications become unusually distinct. The interior exhibits an exaggerated degree of the natural red dotting, especially in the grey substance of the convolutions, the colour not being so bright a red as that from inflammation. In cases of great and old congestion, it is not uncommon for the vessels of the medullary substance to be so charged with dark blood as to impart a uniform dingy grey tinge to this substance. Dr. Bright has shewn that the vessels on which this colour depends are easily perceptible with a lens. In some instances, more especially those in which the circulation has been greatly retarded, the brain is marbled with a purple cloudiness, occasioned, perhaps, by a faint transudation through the gorged vessels. When the obstruction to the return of the blood from the brain has been extreme, as from obliteration of the sinuses by coagula, rupture of the minute vessels of the cerebral substance sometimes occurs and forms numerous petechial extravasations, which, when very close to each other, break down the texture of the part. They are most abundant in and near the grey substance of the convolutions. Similar extravasations are also very common in the vicinity of apoplectic effusions; being sometimes the result of violence done to the surrounding parts by the clot, and sometimes a product of the original tendency which led to the apoplectic effusion. Concussion of the brain often causes the same ecchymoses by laceration of the minute vessels.

Congestive redness may not only be dotted but uniform. This variety of redness, indeed, is most commonly a result of congestion, and is much less frequently the anatomical sign of inflammation than speckled redness. (Andral.) Uniform redness may vary in depth, from a light rose-colour to a deep mahogany hue. It is never general, being found only in patches in different parts. It occurs in either of the two substances, but principally in the grey, both of the convolutions and of the *corpora striata* and *thalami optici*. In the white substance, where it is rare, it is usually found in the vicinity of apoplectic effusions, though it may occur independent of hæmorrhage." 285.

In the brain, as in other organs, the blood, whether extravasated or contained within its vessels, may, from various causes, pass through various tints.

The foregoing characters of congestion may now be contrasted with those of inflammation. No risk of mistake exists on the part of the experienced anatomist. But all our readers have not great opportunities of pathological investigation, and, therefore, we dwell the more strongly on the subject. Serious errors have undoubtedly ensued, from an imperfect acquaintance with the respective morbid states.

"In inflammation (proceeds Dr. Hope,) the substance of the brain, when sliced, presents a preternatural degree of scarlet dotting, which has been compared by M. Lallemand to a white surface sprinkled over with red sand (*injection sablée*.) The dots are occasioned by blood circulating in the naturally colourless capillaries, from the larger of which it may be seen oozing for some seconds after the incision has been made. In young children, the injection is occasionally so great as to give a uniform pink tinge to the whole brain. Intermixed with the dots, are small red stains, probably occasioned by rupture of the capillaries and infiltration of blood into the surrounding pulp. These stains are various in number, size, form, and depth of colour: sometimes they give a marbled aspect to the part; and sometimes, by coalition, they form patches of red, the depth of which decreases from the centre, towards the circumference of the patch. These marks of inflammation may exist either in scattered parts of the brain, or may affect a considerable portion of a hemisphere. The vascular turgesence imparts an increased degree of firmness to the part inflamed; but, at the same time, it is more lacerable than natural. The diagnosis of inflammation from congestive redness will be facilitated by retaining in recollection that the former, when recent, is of a more brilliant or scarlet hue; that it is usually accompanied with anatomical vestiges of inflammation of the membranes, and with the symptoms of cerebral inflammation. When cerebritis is extensive, it may prove fatal without advancing beyond the degree now described, especially if accompanied by meningitis; when limited, it commonly passes into the second degree, or that of softening." 286.

Inflammation of the cerebrum is usually attended with an effusion into the ventricles of serous, or more rarely, of sero-purulent fluid, the quantity of which is never great when the inflammation is acute; in chronic inflammation it may be enormous. Cerebritis is most frequent in children.

SOFTENING OF THE BRAIN.

On this we will not enter, as the lesion was described in the last fasciculus of Dr. Carswell, and has been already noticed in this Journal.*

SUPPURATION, ABSCESS, AND ULCER OF THE BRAIN.

On suppuration and abscess Dr. Hope says little. All that we need notice is the passage which refers to simple ulceration of the brain, an alteration which we have heard a most experienced surgeon deny having ever observed. This

* See the review of the fourth fasciculus of Dr. Carswell's *Illustrations of the Elementary Forms of Disease*. No. 41, for July, 1834—pp. 46-8.—Eds.

form of ulceration, says Dr. Hope, is rare. It affects the surface of the convolutions, and of the *thalami optici* and *corpora striata*, the nervous substance of which is superficially eroded, so as to form ulcers of various sizes and forms, mostly with uneven, ragged edges and a yellow albuminous surface, but sometimes hard and dry. The surrounding cerebral substance may be either healthy or injected. Occasionally, the ulcer communicates with deep-seated abscesses. Sometimes it originates in the arachnoid and pia mater. This species of ulcer is mentioned by various writers, as Morgagni, Scoutetten, and in the *Archives de Médecine*.

INDURATION OF THE BRAIN.

Three degrees of this alteration have been described. The first is of the consistence of the brain that has been immersed for some time in diluted nitric acid—the second equals the firmness of wax—and in the third, the brain is as firm and elastic as fibro-cartilage.

Induration may be either general or partial. When general, it has never been observed to exceed the first degree. The medullary substance may contain little or no blood, and is of a remarkable whiteness: it is firmer than the grey, especially in the central parts of the brain and at the origin of the nerves. General induration has been observed principally after ataxic fever, and after convulsions from the poison of lead. It appears to be usually an acute affection. Induration may affect the whole length of the spinal cord, being here also principally confined to the white substance.

Partial is more common than general induration, and is usually a result of chronic inflammation. In many cases, however, the existence of inflammatory action is only a matter of dubious inference. Partial induration may exhibit various tints of red or yellow; or it may possess the colour as well as the density of gristle. The disease has been observed in different parts of the nervous centres, and it sometimes affects the grey substance of the convolutions exclusively. After subsisting for a considerable time, it occasionally terminates in supuration.

APOPLEXY.

So much has been written and said upon this disease, that our memoranda will be very brief. One or two insulated observations will complete them.

Apoplectic extravasations of blood are much more rare on the surface and within the ventricles, than in the substance of the brain. Andral mentions that, of 392 cases of cerebral hæmorrhage which he has found described by authors, the seat of it was in some part of the substance of the brain in so many as 386; in 202 of which it occurred in the part of the cerebral hemispheres on a level with the *corpora striata* and *thalami optici*, as well as in those parts themselves. Our limited observation would induce us to believe that extravasation of blood into the ventricles of the brain is more frequent in comparison with extravasation in its substance, than the ratio of 1 to 65.* Yet M. Andral's authority and calculations are equally entitled to respect.

Dr. Hope describes from successive preparations the series of changes displayed by apoplectic extravasations from the first effusion, to their final absorption and the formation of a cicatrix. Moderate apoplectic extravasations are curable, but one is usually followed by others, for, unfortunately the original cause remains. Several months appear necessary for the completion of a cicatrix.

* Yet probably we are incorrect; for M. Andral limits his instances of effusion into the cavity of the ventricles, to such as are unaccompanied by any laceration of the substance of the cerebrum. The extravasation must, in fact, be furnished by the vessels of the ventricle.—*Eds.*

Dr. Hope properly and forcibly draws attention to the connexion between sanguineous apoplexy and organic disease of the heart. It is indeed a connexion with which, on all accounts, the practical surgeon or physician should be well acquainted. Did we trust our own experience and our own observation, we should say that this form of apoplexy seldom happens unless the arterial system be diseased, and that the latter is rarely so unless there be hypertrophy of the left side of the heart. These are exceptions, it is true, to this general rule, but as a rule it is usually correct, and a wide expression of this description is of immense importance to the practical man. Indeed, we should say that, in practice, the great value of morbid anatomy is the generalizations which it permits the scientific practitioner to make, generalizations which assist him in individual cases in the hour of need.

HYPERTROPHY, ATROPHY, AND ANÆMIA OF THE BRAIN AND SPINAL CORD.

On these alterations our author is brief, and we shall be silent.

TUBERCLES, SCIRRHOUS, ENCEPHALOID, FATTY, FIBROUS, CARTILAGINOUS, AND OSSEOUS PRODUCTIONS, AND HYDATIDS.

Tubercle and fatty alteration are all that need detain us. The latter is so easily dispatched, that we may begin with its consideration.

A large mass, like adipocere, was found by Dr. Leprestre; and one as large as a hen's egg, and resembling spermaceti, was met with by M. Dalmás. The latter consisted of a large quantity of fatty matter, and another matter seeming to be cholesterine.

Tubercles of the brain and spinal marrow are principally found in children, being rare in infants, and still more so in adults. They are few in number, and sometimes there is only one. Their colour is commonly a pale greenish-yellow, but, when the centre softens, it becomes of an ochre-yellow. Their consistence is somewhat less than that of pulmonary tubercles; and, like the latter, they sometimes acquire a cretaceous composition, in colour and consistence resembling dryish putty. Their most common size is about that of peas, but they may be as small as millet-seeds, or may even exceed the size of hen's eggs; when grouped, they may form still more considerable masses. They would seem to be most commonly generated in the pia mater; and when they arise in the cerebral substance, it is usually in or near the grey matter. The parts where they are found, next in order of frequency to the hemispheres, are, successively, the cerebellum, the pons varolii, the medulla oblongata, various parts of the spinal cord, (especially about the cervical region,) the crura cerebri, the crura cerebelli, the thalami optici, the corpora striata, and the pituitary gland. Tubercles are often surrounded by a cyst, which is generally fine, but sometimes thick, and even fibrous, cartilaginous, or osseous.

Here we close our notice of this Fasciculus, and, with it, of the work of which it forms a portion. The whole does no discredit to its author, a gentleman now honourably distinguished by his talents, assiduity, and zeal. We wish him the success which he deserves and will obtain. For the work itself we will only say that its form, its value, and its cheapness conspire to render it an acquisition to all who would keep pace with the pathological knowledge of the day. The country-surgeon or physician would find himself repaid in its purchase and its study.

II. We now turn to the sixth Fasciculus of the work of Dr. Carswell. It is dedicated to the description and the delineation of hæmorrhage in the various textures in which it occurs.

Hæmorrhage, in the proper acceptation of the term, implies the escape of blood from its vessels into the substance or on the surface of the organs, whether it be retained in these situations, or conveyed to the exterior of the body. It may take place from any portion of the vascular system, in consequence of a solu-

tion of continuity by wound, ulceration, &c.; or it may proceed from the capillary vessels without any obvious lesion. Hæmorrhage may result, too, from morbid alterations of structure or from morbid growths, but in them it must occur in one of the two above-mentioned modes.

Various circumstances operate in producing or in giving a tendency to hæmorrhage. Diseases of the heart and of the vascular system are, perhaps, the most efficient of such causes. The alterations of the heart consist principally of hypertrophy, with or without dilatation, and "of the non-occlusion of the auriculo-ventricular orifices, especially on the left side of the organ, in consequence of permanent retraction of their valves." The result of these morbid states, opposing as they do the return of the venous blood, is venous congestion, which increasing more in some organs than in others, terminates in rupture of the capillary vessels, or in exhalation of blood from their interior. Dr. Carswell has not noticed a frequent cause of extravasation of blood into the lungs:—we allude to contraction of the left auriculo-ventricular aperture. We published several cases of this nature in a previous number of this journal. The rationale of such hæmorrhage is too obvious to require comment. We do not perceive, so clearly as Dr. Carswell, the necessity for congestion in the venous system in cases of hypertrophy of the left side of the heart. Extravasation of blood into the brain is a frequent effect of that disease, but it appears more natural to attribute the rupture of the cerebral vessels to the great and unnatural impulse of the ventricle, than to suppose that this, which is morbidly strong, should be unequal to propel the blood through the veins.

The condition of the blood-vessels is extremely operative in the production of hæmorrhage. The deposition of calcareous and ossific matter in the coats of the arteries—softening of those coats—and loss of elasticity of their lining membrane, are morbid alterations which are known to attend and to occasion apoplexy, aneurism, and various extravasations. It is worthy of remark, that the small vessels of the brain are very liable to rupture, and are seldom aneurismal, while the converse is the case with the larger arteries of the body. The absence of a cellular sheath to the former vessels appears to furnish the explanation of the fact.

Local congestion in the dependent parts of the bodies of those advanced in age or debilitated by disease—and in the substance of various organs, unattended by any lesion excepting extreme fluidity of the blood, are circumstances that precede or accompany hæmorrhage. Vicarious congestions are also not unfrequent, and give rise to vicarious hæmorrhages. Such congestions are boldly attributed by Dr. Carswell to a modification of a function of the capillaries, an explanation which, when analysed, is little more than a learned periphrasis for our ignorance upon the subject.

Prior to describing the physical character of hæmorrhage in the organs in which it most frequently occurs, Dr. Carswell presents a general view of its locality, its local consequences, and the more important changes which occur in the effused fluid. On these heads our notice will be brief.

The locality of hæmorrhage is extremely varied. Several of its forms are only observed in particular organs; others are not restricted in this manner, although they are more frequent in some organs than in others. Age is well known to exert an important influence. Hæmorrhage from the nose is most frequent in childhood—from the air-cells and bronchi in youth—from the digestive, uterine, and urinary organs in middle age and the decline of life—in old age from the brain.

Mucous membrane is more liable to hæmorrhage than any other elementary tissue.

The observations on the *seat* of hæmorrhage are deserving of attention. Yet the principal interest is connected with the situation of apoplectic extravasations, and our notice of the last Fasciculus of Dr. Hope precludes the necessity of our reverting to the subject. The *quantity* of blood effused is various, and arte-

ries usually furnish more than veins. In a case in which death ensued in ten minutes from an ulcerated varyx, Dr. Carswell found the walls of the vein so thickened, and so firmly united with indurated cellular tissue, that considerable pressure was necessary to approximate their internal surface. It was impossible for contraction of the aperture to occur.

The local effects of hæmorrhage are compression, laceration, obstruction of natural passages, inflammation, suppuration, and mortification.

On the consequences of compression we shall say no more than is sufficiently expressed in a general law laid down by Dr. Carswell:—that the disturbance of the functions of an organ from pressure is in the direct ratio of the rapidity with which the compressing cause operates. On the other local effects of hæmorrhage it is not necessary to dwell.

The changes which take place in the effused blood occupy at some length the attention of Dr. Carswell. We cannot follow him, and perhaps it will be sufficient to observe, that effused blood is either removed, or remains and becomes organized—that the removal by absorption is effected with more readiness in some tissues than in others—and that its organization is marked by the successive phases of coagulation, vascularization of the fibrine, and gradual absorption of the latter, giving rise to the appearance of a cicatrix. Sometimes, instead of a cicatrix of this description, the organised fibrous substance is converted into a loose cellular tissue, filled with a serous fluid, and generally traversed by a considerable number of blood-vessels. As the quantity of the serous fluid increases that of the cellular tissue and the vascularity diminish, and thus a considerable cavity is formed, filled with yellow serum, and bounded by the remaining cellular tissue, which at length is changed into a cyst. The obliteration of this is the next circumstance remarked. It is accomplished by the gradual removal of the fluid, and the approximation of its walls, which become united, and form a cicatrix. In some few cases the latter has been found to disappear, the only morbid appearance remaining being a change in the bulk and direction of the grey and white fibrous structure of one of the thalami or corpora striata, in which we must suppose the extravasation to have originally been.

The physical characters of hæmorrhage are next described by Dr. Carswell. He delineates them successively in the brain, the lungs, the digestive, urinary, and generative organs, and finally, in the skin and the cellular texture. The physical characters of effused blood are almost obvious, and certainly simple. We shall scarcely touch upon them.

Of hæmorrhage in the brain we need say no more.

In the lungs, hæmorrhage presents three varieties:—in the first, the blood is contained within the vesicular structure of the lung, and forms a round, circumscribed, solid mass, varying from half an inch to two inches in diameter; in the second, the blood is effused into the cellular tissue, in which it spreads extensively and rapidly, forming a ragged excavation, occupied with blood and portions of engorged and torn cellular tissue; the third variety is a consequence of the second, and consists of the super-addition of rupture of the pleura.

Of hæmorrhage from the digestive organs we will only say, that its black colour is due to the action of an acid on the blood. Follicular ulceration is the most frequent lesion attendant on gastric and intestinal hæmorrhage.

Hæmorrhage from the urinary organs seldom attains considerable magnitude, unless there be malignant disease of the bladder. The medullary fungus is the usual form.

Hæmorrhage from the uterus may be occasioned by congestion of its mucous membrane—by ulceration of the os tincæ or vagina—by carcinoma in either situation—by polypi within the cavity of the uterus. The ovaries are sometimes the seat of hæmorrhage which distends their capsule.

Hæmorrhage of the skin and cellular tissue constitute petechiæ, purpura, and scurvy. On these affections Dr. Carswell offers nothing new.

Of the plates of this fasciculus we can only make one remark—they are beautiful.

Periscope;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcumque potest, atque addit acervo."

I.

SPIRIT OF THE ENGLISH PERIODICALS, AND NOTICES OF
ENGLISH MEDICAL LITERATURE.

INFLUENCE OF BODILY POSITION ON
THE PULSE. By T. R. BLACKLEY,
A.B.

[Dublin Journal, July, 1834.]

This subject was ably investigated by Dr. Graves, in the fifth vol. of the Dublin Hospital Reports, and is noticed by us in the 15th vol. of this Journal, p. 152 *et seq.* Dr. Graves acknowledged his inability to explain the reason why position of the body influenced the number of pulsations of the heart, and this acknowledgement stimulated our author to unriddle the mystery. The following extract is necessary, to shew the basis on which Mr. B. rests his conclusions.

"I believe it will be readily conceded, that the action of the heart in a strong and healthy individual, while in a state of rest, is uniform and equal, that it is possessed of a power sufficient to expel a certain quantity of blood at each contraction of the left ventricle, which power is necessary to overcome the obstacles presented to the egress of the blood.

Let us suppose, for instance, that the heart of a healthy man in the erect posture beats sixty times a minute, and at each beat expels one ounce of blood, sixty ounces per minute will be of course expelled; but if the *power* of the heart be increased or diminished, we must expect a corresponding alteration in the number of beats. Thus, if the power be *increased* one-tenth, it will require but fifty-four beats to expel sixty ounces in a minute; but if

it be diminished one-tenth, it will require sixty-six beats.

To this variation of power in the heart are the phenomena of which we speak attributable, or rather, I should say, *the variation of resistance to the heart*, which comes to the same thing. A question may here be asked, namely, 'can you prove that the heart discharges a greater quantity of blood at one time than another, or that the left ventricle does not at each contraction expel the entire of its contents?'

I am fully aware that the general opinion is opposed to mine; indeed, actual experiment would seem to be against me, for it has been affirmed, that on inserting the finger into the left ventricle of a recent heart, it contracts through its *whole extent*; nevertheless, I think I can prove the reverse, from the anatomy and mechanical construction of the heart itself.

1st. There are no muscular fibres going from the substance of the left ventricle to be inserted into the opposite edges of the valves, or above them into the aorta; therefore the space immediately inferior to the valves cannot be compressed.

2dly. We never find the left ventricle perfectly closed after death, even though it should be at the time that rigidity of the muscular fibre prevails.

3dly. If the valves had no support, as by a certain quantity of blood under them, to act as a counter pressure, they would be liable to injury from the superincumbent mass of blood in the aorta.

4thly. A vacuum being formed by the expansion of the ventricle, the valves would be drawn downwards with considerable force to fill it up, and thus an additional weight be unnecessarily imposed on them.

Lastly. In a very rapid pulse, say 160, we can scarcely conceive the sides of the left ventricle to be closely approximated through their whole extent at each pulsation, and separated again, the usual quantity of blood as in health being expelled at each contraction. But we can readily admit that such a number of palpitations may be effected, the ventricle contracting but slightly at each beat; or a very small quantity of blood may be contained in the ventricle at each contraction, and thus supersede the necessity of the ventricle being much dilated; and we may observe, that in those cases where the pulse is so frequent as I have mentioned, it is never full and strong, but on the contrary, weak and thready, evidently proving that a very small quantity of blood indeed is forwarded at each contraction of the ventricle."

Our author goes on to state that, in the erect posture, the column of blood in the arch of the aorta, together with that in the carotids, presses on the semilunar valves, and opposes the egress of blood from the left ventricle. The arteries being all full, a considerable *vis à tergo* is necessary to force the blood in all directions, but especially upwards. In the perpendicular position, too, the return of blood by the veins from all the lower part of the body is much retarded by gravitation, and consequently requires greater force from the heart to drive it through the capillaries, and, if you please, pump it up from the veins.

"In the horizontal position these obstacles are lessened or removed; the blood in the carotids and arch of the aorta does not press with such force upon the valves, but chiefly the *veins*, namely, all those below the heart, being placed in the most favourable position for *spontaneously* returning their contents, remove an immense obstacle to the egress of blood from the left ventricle. Hence it follows, that resis-

tance being opposed to the heart in the horizontal position, and the same power exerted, a greater quantity of blood is propelled at a time, and consequently the number of pulsations necessary to transmit the same quantity in a given time in the erect posture diminished.

The frequency of pulsation, then, is in a direct ratio to the obstacles presented to the heart's action, whether those be mechanical or arising from the debility of the heart itself. On the supposition of the correctness of this view, can be explained, I think, all the phenomena so closely observed by Dr. Graves."

We do not think that this explanation is correct or satisfactory. Mr. B. seems to forget that the heart, having once overcome the resistance of the arteries, and injected its contents into these vessels, their elastic and muscular coats perform all the rest. The blood is prevented from returning into the ventricle by the semilunar valves, and consequently it must be forced along the arteries and through the capillaries by the arteries themselves. Now, as far as gravitation is concerned, the arterial circulation, in all parts below the heart, is favoured rather than checked; so that the ingenious theory here broached cannot be made available. We cannot offer a satisfactory reason, ourselves, for the increased frequency of the pulse in the erect posture; but we imagine that it is far more connected with the muscular exertion of standing than with gravitation. Thus, the pulse is increased by the simple change from the horizontal to the perpendicular position; but it is still more accelerated by running up stairs, or up a hill, proving how much influence muscular contraction has on the heart and arteries. We apprehend that standing and walking give rather resistance than assistance to the arterial circulation, by the pressure of the muscles on the vessels; and the heart may thus be called upon for a greater number of contractions. The venous circulation ought to be accelerated by muscular action; and yet we invariably see the veins swell by exercise, as is very apparent in horses, and in the

arms of blacksmiths and others, while straining the muscles.

DANGER OF ERGOT OF RYE IN LARGE DOSES.

In a report from the Wellesley Female Institution, in the July Number of our Dublin contemporary, there are a few remarks on the *indiscriminate* and *inordinate* employment of secale cornutum, by Dr. Maunsell. Mary Redmond, in the fourth month of pregnancy, was seized, after a fright, and severe exercise, with hæmorrhage from the vagina, which continued at intervals for several days. On the 10th of March, 1834, at six in the afternoon, Dr. Churchill saw her, and gave her 45 drops of laudanum. At 9, she was so weak that a plug was introduced. At 7 next morning the plug was expelled, with considerable hæmorrhage, and a grain of opium, with some acid mixture, was given every two hours. At 8, p. m. the hæmorrhage set in again, and Dr. C. gave her sss. of the ergot at once, repeating it in half an hour. On the 12th, she had a violent head-ache; and, in the course of the day, became delirious, and could hardly be kept in bed. These symptoms yielded to purgatives, cold lotions, blisters, &c. In a few days afterwards, the hæmorrhage again returned, and the ergot was repeated, with another recurrence of delirium, but in a slighter degree.

The second case was a Mrs. Forest, two months pregnant, who was attacked with hæmorrhage on the 21st April, and for which the usual remedies were prescribed. Next day, the discharge having recurred in an alarming degree, the infusion and substance of half a drachm of the ergot was given by Dr. Churchill in two doses, at 15 minutes interval. After taking it, she fell asleep, and on awaking the discharge returned. Another scruple of the ergot was given her, which produced vomiting after an hour. On the following day she was in a state of half stupor, with violent

headache and depressed pulse. These symptoms gave way to proper medicines. These two cases excited inquiry, when it was found that they did not stand alone. A case was related to our author by Dr. Johnson, in which, through mistake, the infusion and substance of two drachms of the ergot were given in two doses. In six hours, Dr. J. was again called, and found the patient in a state of incomplete coma, with livid face and muttering delirium. There was no uterine action induced by this extreme dose. She was delivered by the forceps, and remained 30 hours delirious and in a state of partial stupor. She had a bad recovery. In another case, where the ergot was largely used, Dr. Johnson saw complete gangrene of the external parts, with death in six hours after delivery. In a third, the same experienced physician witnessed extensive sloughing of the vagina, without any other probable cause. Mr. Cusack informed our author that similar cases had occurred in his practice. In a German work, too, the author finds that Professor Joerg, of Leipzig, made experiments on himself, his pupils, and on animals, from which it appeared that nausea, vomiting, pains in the abdomen, weight and pain in the head, with vertigo, followed large doses of the ergot.

The foregoing facts are not sufficient to prevent the moderate use of this important medicine; but they ought to be borne in mind, and prove a check to the reckless manner in which this medicine is now sometimes administered.

ON SCROFULA. By JAS. EAGER, M.D.

Dr. Eager has published a somewhat elaborate paper on the nature and treatment of a disease, which proves a great scourge in this country. The author was a house surgeon in some of the Parisian hospitals, and had good opportunities of witnessing the effects of various modes of treatment, and especially the treatment by iodine. On the nature and causes of this too well known

disease, we need not dwell. The exhibition of iodine on a large scale at the Hospital of St. Louis, in Paris, and the wonderful cures which are said to be performed there, engage our author's chief attention in this paper, and our's also.

"The use of iodine requires the greatest prudence. It has been administered internally both in a simple form and combined with iron, mercury, and potass, in the form of pill or in solution. Externally, combined with lead under the form of ointment, or dissolved in water in its simple state, either in lotion, injection, or bath. All these means have had their respective advantages. They were consequently used on various occasions. Iodine taken internally constitutes the basis of the treatment where the stomach is not affected. The results of cutaneous absorption are too doubtful to admit of frictions as the principal form of administering iodine. Children take pills with much difficulty. Pure iodine may be given in the form of tincture diluted with water. Two reasons, however, prevent us from using the tincture at this hospital. In the first place the fear of mistakes in dropping, mistakes the more easily made when there are many children under treatment; and secondly our apprehensions lest the water of Arcueil (which is used exclusively in this establishment, and which contains a large quantity of calcareous salts,) may alter the nature of this medicine. The same objection holds good with regard to the æthereal tincture of iodine, the simple or ioduretted solution of hydriodate of potass, and the alcoholic æthereal tincture of ioduret of mercury. We use the solution of iodine in distilled water called by Lugol, 'Eau minerale iodée.' Each pint of water contains two grains of iodine and four grains of hydriodate of potass, the latter being added to render the former more soluble. We have not deemed it prudent to adopt the use of the solutions of different degrees of strength which Lugol employs; because in the treatment of children, particularly when they are numerous, these different proportions offer many inconveniences without any real advantage. It is much more simple to administer a

solution that contains a fixed quantity of iodine, which may be prescribed at will in more or less large doses, than to have for each patient solutions that contain a variable quantity of iodine.

The dose varies with the age, the state of the digestive canal, its influence on the disease, always beginning with three ounces of the solution, which may be gradually augmented to 12 ounces in the day. This is the strongest dose we have given, viz. ʒvj. in the morning and ʒvj. in the evening. Each ounce contains the $\frac{1}{4}$ of a grain of iodine and $\frac{1}{4}$ of a grain of hydriodate of potass. In following this method we know the exact quantity prescribed. After the use of this proportion for some time, we thought to double the quantity of iodine for each pint, but were soon obliged to abandon it in consequence of the disagreeable taste of the medicine, and a sensation of heat which it occasioned in the throat. The solution may be sweetened immediately before use with sirup of gum. If mixed with this sirup long before hand, the iodine becomes decomposed, and the solution loses both its colour and taste. In order to preserve it long fit for use, it should be kept in bottles well corked and opened as seldom as possible. The smallest dose to begin with is ʒj. morning and evening, which may be increased to ʒvj. each time as before-mentioned. This dose is even stronger than that Lugol recommends for adults. When no accidents occur to contra-indicate its use, we continue this solution during four or five weeks, then we stop it, and give a purge of sulphate of soda or magnesia. The purgative is repeated two or three times before we return to the use of the solution. The suspension continues generally fifteen or twenty days. We then resume, and continue its use a month, then stop it again to give the purgative as before said. It sometimes happens that acute accidental diseases oblige us to discontinue the treatment for some time. Diarrhœa and emaciation, which have been so much dreaded, seldom occur; when they do, they always cease on stopping the medicine. I have seen but one case in which the patient became thin; all the other chil-

dren, on the contrary, have become very fat. The appetite has increased, and their soft flesh become hard and coloured. I have seen a case in which the use of iodine was followed by cardialgia, and this affection ceased on using \mathfrak{zj} . of bark once a day, without discontinuing the iodine; and after a short time we were able to give the medicine alone. It sometimes happens, though seldom, that the use of iodine ulcerates the mouth and affects the breath as in mercurial salivations. In some females symptoms of cerebral congestion appear, such as epistaxis, which yielded to rational treatment. It is remarkable that these symptoms manifested themselves at the period of puberty, and consequently may be ascribed more rationally to a deviation of the menstrual flux, than to any other cause. Messrs. Gardner and Coindet attribute to a kind of iodine saturation, accidents which have been remarked, in some patients, such as fevers, palpitation, dry cough, tremblings, loss of strength, and swelling of the legs. At the Children's Hospital we have not remarked such cases. This may be owing to the precaution we use of purging the children from time to time. Moreover, these symptoms are extremely frequent in the third stage of phthisis in patients who never used iodine. The ioduret of iron may be given with good effect in this affection, more particularly in cases where the patients are very pale, and their flesh soft and flabby. This medicine may be given in larger doses than the hydriodate of potass. We begin by half a grain in \mathfrak{zj} . of water morning and evening, and increase it half a grain every four days. It may be increased to ten grains a day; in higher doses it induces vomiting. The solution of ioduret of iron produces diarrhœa much more frequently than the iodine solution. Iodine frictions are very useful auxiliaries to its action internally. We rub the tumours with an ointment composed either of ioduret of lead, ioduret of mercury, or ioduret of potassium. It sometimes happens (as with other medicines in all diseases,) that the ointment first used brings the tumour to a certain degree of diminution, and then

it remains stationary. In such cases it is useful to substitute one of the others, and by this means the absorbent system is kept in a state of salutary excitement. The ointment of ioduret of mercury is composed of \mathfrak{zj} . axunge, and \mathfrak{zss} . of ioduret of mercury, that of lead of \mathfrak{zj} . to \mathfrak{zj} . of axunge, and that of ointment of hydriodate of potass with iodine, of \mathfrak{zj} . hydriodate and twelve grains of pure iodine to each ounce of axunge. The ointments of ioduret of mercury and potass determine a pricking pain that continues fifteen minutes, that of lead does not produce this sensation although applied to ulcers, spread on linen or charpie. A child ought to be rubbed but once a day, and an adult twice, in consequence of the skin being less irritable, and absorption less active in the latter; each friction during five or six minutes; and the quantity of the ointment varies with the size of the tumour, the minimum being that of a small pear or nut. We have in no case relied on frictions as the sole means of cure. They have always been combined with iodine internally and in baths. It is a matter of perfect indifference to which of the ointments you give a preference. For injecting fistulous trajets we use a solution of twelve grains iodine and twenty-four hydriodate of potass in one pint of water.*

An iodine bath is used in the hospital; but Dr. E. should have given us English weights and measures, instead of litres, &c., which are unintelligible to most people on this side of the Channel.

"Sixty-seven female children have been treated with iodine for a period sufficiently long to enable us to determine its effects with precision. Their age varied from four to fifteen years, a little more than half were over ten years old. In all of them the disease was of long standing; one was in the hospital since 1822, two since 1826, six since 1828, ten since 1829, twenty-six since 1830, and thirty-two were admitted since 1831, either before or after the 1st April, at which period the treat-

* Dublin Journal, July, 1834.

ment commenced. In all these children the disease presented itself under different forms. Fifteen of the sixty-seven who were treated by iodine were discharged cured of the apparent symptoms of the disease; fourteen experienced considerable amendment, which announced a speedily approaching cure. In thirteen others, although the improvement was less evident, one could judge that the cure would take place at some not far distant period; five received but little benefit from it, and, in fine, twenty did not receive the slightest advantage from the use of this medicine. Among the children cured was one admitted in 1826, two in 1829, seven in 1830, and five in 1831. Among those who experienced considerable benefit, was one admitted in 1826, two in 1828, three in 1829, five in 1830, and three in 1831. Of the twenty who were not at all relieved, two were in hospital since 1828, four since 1829, seven since 1830, and the remaining seven since 1831. All these children, with a few solitary exceptions, were much more affected at the period they commenced the use of iodine than at the time of their admission. The disease had increased with their sojourn of many months, and even years, in the wards."

Seventeen of the sixty-seven had glandular swellings. In only four of these did the tumors entirely disappear. In thirteen cases the iodine completely failed. When left to Nature, the ulcers of scrofula take many months to heal; and even then leave ugly cicatrices. "On the contrary, when art interferes, the cure is obtained in fifteen days, or a month at the farthest." Our author concludes by averring that no other remedy hitherto used in scrofula has been so successful as iodine. The paper appears to be a translation from the French rather than an original essay; nevertheless it is well worthy of perusal by practitioners in this country.

ANOMALOUS TUMOUR IN THE RIGHT HYPOCHONDRIUM. By R. L. NELSON, Esq.

[Dublin Journal, July, 1834.]

The following case, which we shall greatly abridge, is very interesting.

An English physician, aged 27 years, placed himself under the care of Mr. Nelson, in July, 1833, labouring under dyspeptic symptoms of an aggravated kind. He had a delicate, bilious appearance, and stated that he had been subject from youth to occasional pain in the right side, accompanied by derangement of the bowels. He had now loss of appetite, thirst, furred tongue, inertness, slight pain in the right hypochondrium, accompanied by tenderness and fullness of the liver in this situation. Bowels confined, urine high coloured. Under slight aperients and proper diet he rapidly recovered; but returned to the narrator in a month, stating that he had hepatitis. On examination the liver was found to be much enlarged, painful to the touch, and harder than natural. He was put upon proper treatment, but improved slowly. Early in September Mr. N. discovered a small tumor below the margin of the right false ribs, apparently placed upon the inferior portion of the right lobe of the liver. It communicated to the finger a slight pulsation, which increased daily, till it became evident to the eye. At the end of three weeks the tumor was the size of half an apple. "It was accurately circumscribed, and presented both to the feel and by auscultation the peculiar purring thrill of aneurismal varix." The action of the arterial system generally became increased, with the increase of the tumor. The aorta also exhibited a remarkably loud *bruit de soufflet* through its whole course. Dysphagia was considerable. Leeches, blisters, digitalis, &c. were employed without advantage. Dr. Stokes met in consultation in the last week of September, and a careful examination was instituted and repeated several times. It was thought that there existed inflammation of the lining membrane of the aorta—enlargement of the liver—and an aneu-

rismal tumor of uncertain nature and source. Matters grew progressively worse—the action of the heart and arteries becoming more violent, and the pulsation of the tumor more violent. In consequence of getting cold, some bronchial inflammation was set up, and three leeches to the trachea produced such a hæmorrhage as nearly destroyed life. They were obliged to give him cordials, and even quinine. In consequence of, or as a coincidence with the hæmorrhage, the aneurismal pulsation ceased altogether, and the size gradually decreased till the tumor was no larger than half a marble. Before Christmas it had totally disappeared. After this he appeared to recover—to gain strength, and even flesh, so as to be able to walk a mile without much fatigue. He was, however, rather incautious, and twice caught cold, with repetition of the bronchitis. In the mean time anasarca of the lower extremities appeared, and gradually progressed to the trunk, with difficulty of breathing and other distressing symptoms, as those of ascites and tympanitis. He died rather suddenly on the 12th of April of the present year.

Examination post-mortem. The liver was found to be somewhat enlarged, and generally tuberculated. The superior lobe of the left lung was hepatized—water in the cavities of the pleura—marks of inflammation in the trachea and bronchia—left side of heart hypertrophied and dilated. The arteria inominata was considerably increased in calibre, and the left subclavian slightly. The aorta, in its transverse portion, at the point where it is joined by the ductus arteriosus, exhibited a singular constriction, as if a sharp instrument had been pressed upon its upper surface until it had diminished the calibre by about one half. There was no deposition in its coats of osseous or calcareous matters, and the ductus arteriosus was open. The aorta, in the rest of its course, was somewhat smaller in calibre than usual. The semilunar valves of the aorta were either removed or completely obliterated by an irregular fleshy mass which grew from the line of junction of the vessel with the heart,

and almost entirely filled the canal. The communication between the heart and the aorta was reduced to an irregular slit-like opening, through which a common probe could not pass without difficulty; and yet through it all the blood of the system found its way.

There then was the great seat of disease, all the other phenomena being mere effects, and not causes. The author very naturally asks what could have been the nature and seat of the circumscribed and pulsating tumor which occupied the attention of the medical attendants for three or four months? No trace of lesion could be detected any where to account for this tumor. We have no doubt, in our own mind, that it was a distended gall-bladder, and that the pulsation was communicated from the heart.

A case occurred in our own practice, where a circumscribed and pulsating tumor appeared in the epigastric region, and was pronounced to be aneurism of the coeliac artery by one of the most distinguished pathologists of London, and that after repeated and careful examination. After the exhibition of some doses of calomel and opium, followed by brisk purgatives, a quantity of viscid bile came away, and the coeliac aneurism disappeared. We would therefore caution our brethren against confident diagnosis in pulsating tumors; for this pulsation can be communicated, especially to a globular body filled with fluid, as the gall-bladder for example, with such astonishing similitude to an aneurism, that it is next to impossible to distinguish between them.

HOMŒOPATHY.

The Rev. Thomas Everest has addressed a letter to the medical practitioners of Great Britain, in favor of the new doctrine. He commences his pamphlet with some very handsome eulogies on the medical character, and then gives us a concise history of the doctrine from its origin in the brain of a German student, in 1790, down to the pre-

sent time. The Reverend Gentleman calls upon us to embrace a system which is utterly opposed to every thing that has been taught and learnt since the days of Hippocrates. "Be it right (says he) or be it wrong, it is, at any rate, utterly opposed to the present practice, and there cannot by any possibility be any alliance or truce between homœopathy and allopathy. Hahnemann's theory must either be admitted or rejected altogether. It allows of no compromise—it will not amalgamate in any way whatever with the allopathic system."

"It is doubtless well known to you, gentlemen, that all over the Continent of Europe, and in America also, Homœopathy is said to be flourishing—it is said to have performed, and to be daily performing cures which are almost miraculous; it is said to have so far surpassed polypharmacy, as to have cured on many different occasions dangerous fevers in 24 hours, mental affections hitherto regarded as incurable, chronic complaints of very long standing, which had defied with equal imperturbability, the lancet and the blister, the pill and the draught, the change of air, and the change of diet, the physician and the druggist, the surgeon and the nurse—it is said amongst other wonders, to have supplied a complete and almost unailing specific against the modern opprobrium medicorum, the Asiatic cholera."

It was very right for Mr. Everest to use the saving term "it is said," for we can assure him that, as far as we have seen the practice of homœopathy in this metropolis, there is not one word of truth in all the cures that "*are said*," to have been performed by the new system. All the cures that have taken place were effected by nature, aided probably by the influence of the imagination—which has much to do in sickness. Mr. Everest calls on us to give homœopathy a fair trial, and not to condemn it untested. Our answer is, that we have seen it repeatedly tested by the homœopaths themselves, without, in any instance, the slightest proof of benefit. We ask Mr. Everest if we are justified, after such evidence,

in trifling with human life, and allowing diseases to advance uncontrolled by active remedies? For our own parts we should consider ourselves culpable if we permitted the well-known resources of our art to remain in abeyance, while the inert and ridiculous remedies employed by the homœopaths were set in array against dangerous diseases. Suppose Mr. Everest were addressed by a medical practitioner, and told that, in a certain chapel in London, the gift of tongues, and inspirations of the Holy Ghost were conferred, and that this solemn truth was asserted and confirmed by hundreds and by thousands:—would not Mr. Everest have good cause for abandoning the old scriptural ritual of his church, and adopt or test the new light. We apprehend that the author of this pamphlet would spurn the idea of embracing the Regency-square system of theology, though the miracles of Irvine are not a whit more fabulous than the cures of Hahnemann.

SOMNAMBULISM. CASE OF JANE C. RIDER.*

We apprehend that the state of somnambulism is but little understood. It appears to us to be more allied to delirium (not from disease) than to sleep. In delirium, the mind is so occupied with one or more subjects, that it receives not, or attends not to impressions conveyed through the medium of the senses, unless these impressions relate to the subject of the delirium. But the senses, such as sight, touch, hearing, &c. are quite as alive to the subject of the delirium, and to all impressions connected with it, as if the individual were wide awake. We will endeavour to illustrate this. In very early youth we had a school-fellow who was a somnambulist. He frequently got out of bed in the night, and walked along the range, or parapet wall, of a bridge in the neighbourhood,

* By L. W. Belden, M.D. 18mo.

returning to his bed in perfect safety. The writer of this article met the somnambulist one moonlight night on his way to the bridge, and observed him attentively. His eyes were open, but he seemed to regard no surrounding object. He took no notice of his school-fellow, but kept his eye on the path along which he was walking. We followed him at some distance, in the most silent manner. He cautiously climbed up at one end of the parapet wall, and slowly marched along, apparently without fear. He got down at the other end, walked across the road, and returned by the other wall to the road again, after which he went home and to his bed. Sometimes he had an imperfect recollection of the transaction, but always asserted that it was a dream. It may be remarked that the school-boys were often in the habit of running along the parapet-walls of the bridge, by way of bravado, in their way to and from school. The boy's mother watched him one night, and when she observed him approach the bridge, she shrieked out, when the boy started wildly and fell into an epileptic fit. To these fits we believe he continued subject ever afterwards, but he ceased to be a somnambulist.

There are cases, however, which are more intricate or inexplicable than the above, and which bear a considerable resemblance to insanity, or to injuries of the brain, attended with morbid sensibility of one or more organs. In those instances where it occurs in the form of a fit or paroxysm, preceded by certain premonitory symptoms, there is, almost invariably, some disorder of a bodily function. There is entire interruption of consciousness—or rather of memory, the individual, on waking, retaining no recollection of what has passed. Knowing the fallacies which have crept in, knowingly or unconsciously, into all cases of the wonderful kind, we freely confess that we do not believe one word in ten of the most *authentic facts* that have ever been put on record in such instances. As the present company is always excepted in common conversation, so we must except from scepticism, whatever comes

directly before us on the evidence of living witnesses. Some of the statements on the following case are startling; but the narrators are highly respectable, and though they may have been occasionally deceived themselves, we are quite sure they are incapable of the wish to deceive others.

Case. Jane Rider, aged 17 years, is the daughter of a respectable mechanic, and her mother died of disease in the brain. She was always of a mild, obliging, and intelligent disposition. Her education was much superior to her station in life. She is fond of poetry, and correct in her taste. She is plump, but rather handsome. She is subject to headaches and other symptoms of determination to the brain. She had also chorea a few years previously.

The affection in question first made its appearance in the night of the 24th June, 1833.

"I was called, under the impression that she was deranged, and such at first was my own belief. She was struggling to get out of bed, complaining very much at the same time of pain in the left side of the head. Her face was flushed, the head hot, eyes closed, and her pulse much excited. Attributing the attack to the presence of undigested food in the stomach, I gave her an active emetic, which she took voluntarily, supposing me to be her father. She rejected a large quantity of green curants, after which she became more quiet, and soon fell into a natural sleep, from which she did not wake till morning; when she was totally unconscious of every thing which had passed in the night, and could scarcely be persuaded that she had not slept quietly during the whole time."

In about a month the fit recurred; she was allowed her own way. She dressed, went down stairs, and made preparations for breakfast. She arranged the table with precision, brought cups, &c. out of a dark closet, and avoided all intervening obstacles.

"She then went into the pantry, the blinds of which were shut, and the door closed after her. She there skimmed the milk, poured the cream into one

cup and the milk into another without spilling a drop. She then cut the bread, placed it regularly on the plate, and divided the slices in the middle. In fine, she went through the whole operation of preparing breakfast with as much precision as she could in open day; and this with her eyes closed, and without any light except that of one lamp which was standing in the breakfast room to enable the family to observe her operations. During the whole time she seemed to take no notice of those around her, unless they purposely stood in her way, or placed chairs or other obstacles before her, when she avoided them, with an expression of impatience at being thus disturbed."

She finally went to bed, and, in the morning, finding the breakfast things prepared, she expressed surprise and dissatisfaction that she had been allowed to sleep so long.

After this the paroxysms became more frequent, and varied without end. Sometimes the whole paroxysm was passed in bed, where she sung, talked, and repeated pieces of poetry. One night she was seen to thread a needle in the dark—another, with her eyes closed—in a third, she prepared a dinner with her eyes closed. The following is a description of the paroxysms at a period when vision was extremely acute. After this was lost the other phenomena became less remarkable.

"The state of somnambulism was usually preceded by a full, heavy, unpleasant feeling in the head—sometimes by headach, ringing in the ears, cold extremities, and an irresistible propensity to drowsiness, attended with a feeling as if weights were appended to the eye-lids. There was almost always a slight contraction of the eye-brows, the cheeks were flushed, and sometimes tinged with a crimson hue. By great exertions, the fit might be put off for hours after the appearance of these symptoms; but, in order to gain this reprieve, it was necessary for her to walk, or be engaged in some active employment. The most effectual preventive was exposure to the open air. The moment these precautions were relaxed and sometimes even in the midst of her

active duties, she experienced what she described as a sense of rushing to the head, attended with a loss of the power of speech and motion. If in this state she was immediately carried into the open air, the fit was often arrested; but if this was delayed a moment too long, she lost all recollection, and could not be by any efforts be aroused. To a spectator she appeared like a person going quietly to sleep. Her eyes were closed, the respirations became long and deep, her attitude, and the motions of her head, resembled those of a person in a profound slumber. During the fit, the breathing, though sometimes natural, was often hurried, and attended with a peculiar moaning sound, indicative of suffering. At times the pulse was accelerated, but generally it did not vary much from the natural standard. I have remarked, that in her first paroxysm the head was hot, but such was not commonly the case, nor was there any peculiar throbbing of the temporal arteries—the hands and feet, however, were almost invariably cold.

Her manner differed exceedingly in different paroxysms. Sometimes she engaged in her usual occupations, and then her motions were remarkably quick and impetuous—she moved with astonishing rapidity, and accomplished whatever she attempted with a celerity of which she is utterly incapable in her natural state. She frequently sat in a rocking-chair, at times nodding, and then moving her head from side to side with a kind of nervous uneasiness, the hand and fingers being at the same time affected with a sort of involuntary motion. In the intervals of reading or talking, and even when engaged in these very acts, her nods, the expressions of her countenance, and her apparent insensibility to surrounding objects forced upon the mind the conviction that she was asleep. Occasionally she was cheerful, disposed to talk, and willing to exercise her powers; the greater part of the time she was irritable and petulant. Pain in a circumscribed spot on the left side of the head was, I believe, always an attendant on the paroxysm, and frequently occasioned a degree of suffering almost beyond endurance. To

this spot she invariably pointed as the seat of her agony when she repeated the expression, 'it ought to be cut open, it ought to be cut open.' Occasionally the whole system was thrown into agitation, and she presented the appearance of a person in a violent fit of hysterics.

Her eyes were generally closed, but at times they were stretched widely open, and the pupil was then very considerably dilated. These different states of the eye seemed to occasion no difference in the power of seeing—she saw apparently as well when they were closed, as she did when they were open. In the day time she always had the eyes covered with a bandage during the paroxysm, nor would she allow it to be removed for a single moment, unless the room was unusually dark. In order to test the sensibility of the eye, I took one evening a small concave mirror, and held it so that the rays proceeding from a lamp were reflected upon her closed eyelid. When the light was so diffused that the outline of the illuminated space could scarcely be distinguished, it caused the moment it fell on the eyelid, a shock equal to that produced by an electric battery, followed by the exclamation, 'why do you wish to shoot me in the eyes?' This experiment was repeated several times, and was always attended with the same result. It was also tried when she was awake, and the effect, though less striking, was very perceptible. The same degree of light thrown on my eyelids, occasioned no pain.

How far she was sensible to the presence of surrounding objects, it is very difficult to determine; indeed facts seem to prove that she was not in every paroxysm, alike in this respect. In the early stage of her complaint, she appeared to take little notice of persons, unless they were connected with her train of thought, and then she regarded those with her only as the representatives of the persons whom she imagined to be present. Nor did the sight or the hearing have any tendency to correct the false impression. Thus, in her first paroxysm, she regarded me as her father, and continued to do so

as long as I remained with her; but, in her subsequent fits, this idea was never revived. Her conception of persons was generally made to correspond with the idea of the place in which she conceived herself to be. She was in the habit, when well, of spending her evenings in the room with the children of the family, and it was in their company that she often imagined herself to be during the paroxysm. The questions which were at these times proposed to her to test her powers of vision, were cheerfully and readily answered, because they were questions which it was natural for children to ask; or, at least, she supposed them to proceed from children. Much that she said was also directed to them, though it was evident, at times, her conceptions and perceptions were strangely intermingled. In a paroxysm, soon after the arrival of her father, he asked her a question which she answered by addressing a little boy belonging to the family, who was not then in the room; but his knife which he placed in her hand, she immediately recognised as her father's, and wondered how that came to be in Springfield while he was in Brattleborough. At a later period of her complaint, she appeared to comprehend more of what transpired in her presence, and accordingly she obstinately refused to read cards, or submit to experiments of any kind. These trials she then evidently regarded as so many attempts to impose upon her; and in adopting this conclusion she reasoned with perfect consistency; for if she could actually see as she appeared to—if to her vision, night was converted into day, and darkness into light, while she was unconscious of anything peculiar to herself, what could be more annoying than to be constantly teased with questions which to her senses were perfectly obvious? If a request were made of her which appeared reasonable, especially if it related to her customary duties, she readily did whatever was required."

It is curious but certain that she recollected, during a paroxysm, circumstances that had occurred in a previous attack, but which had been forgotten

in the interval. Proofs of the fact are adduced, but we need not quote them. All attempts to rouse her from these states of somnambulism were fruitless. She heard, felt, and saw, but the impressions would not awake her. A pailful of cold water was poured over her in one instance, when she exclaimed, "why do you wish to drown me?" She then went to her chamber, changed her dress, and returned. Large doses of laudanum were given her to relieve pain, which it did, and she awoke much sooner afterwards. At the termination of a paroxysm, she always sunk into a sound natural sleep. The paroxysm appeared to be connected with disordered digestion. Though the appetite was good, the food occasioned oppression, with headache and acidity.

In November, experiments were made to ascertain the acuteness of her vision. The following will suffice as an example.

"She was seated in a corner of the room, the lights were placed at a distance from her, and so screened as to leave her in almost entire darkness. In this situation she read with ease a great number of cards which were presented to her, some of which were written with a pencil, and so obscurely, that in a faint light no trace could be discerned by common eyes. She told the date of coins, even when the figures were nearly obliterated. A visitor handed her a letter, with the request that she would read the motto on the seal, which she readily did, although several persons present had been unable to decipher it with the aid of a lamp. The whole of this time the eyes were to all appearance, perfectly closed."

As her malady was aggravated by the curiosity of visitors, and the experiments made on her, she was removed to the hospital in Worcester (America) on the 5th December last. Here Dr. Woodward kept an exact register of occurrences corroborating, in all essential points the foregoing statements and many others. In the hospital she was put on a regular system of diet and medicine—her health greatly improved—and her somnambulism diminished. When the accounts closed she was a

great deal better, and we have reason to think she will completely recover. From various circumstances detailed in the narrative, but which we could not introduce here, we are strongly impressed with the belief that there is no imposture in this remarkable case. We are certainly not much inclined to credulity, and are much more likely to run into the opposite extreme; but we see nothing in the foregoing case, extraordinary as it may appear, which is incompatible with the powers of the human frame, and its spiritual tenement under peculiar states of morbid excitement.

NITRATE OF SILVER IN EPIDEMIC CHOLERA. By CHARLES LEVER, M.D.

We should not have noticed this subject, were it merely as setting forth a remedy for a disease which lately frightened these isles from their propriety. But it is on another account, namely, the safety with which the nitrate of silver may be taken internally, and that in large doses. The name of the medicine, and its caustic effect on the external surface of the body, have checked its internal use; though the phenomena attendant on its application to sores and morbid structures generally, might have lessened the fears of practitioners rather than increased them. The nitrate of silver is applied to an irritable ulcer on the leg or other part, and the pain is very little, while the irritability is seen to be materially lessened in a short time afterwards. To give a still more striking example: the fauces are red and sub-inflamed—the passage of food gives much discomfort; and there is a constant secretion of viscid saliva from the parts, clearly the product of inflammatory action. A few applications by means of a sponge to the fauces relieve or cure all these symptoms. Now it is to be remembered that the membranes at the extremities of all tubes are much more sensitive than any other portions of the canals; and therefore, as we find that the fauces, the

pharynx, &c. will easily bear a solution of nitrate of silver containing five or six grains to the ounce, why should we fear that the stomach itself would be unable to bear a similar medicine? We have exhibited the nitrate of silver to some hundreds of patients—often in the dose of four and six grains a day, and never saw any injurious consequences result. The remedy is exceedingly valuable in many affections of the stomach.

In our Liverpool contemporary of July last, Dr. Lever has stated that during extensive observation of cholera in the cholera hospitals of the north of Ireland, he was led to attribute the general failure of remedies to the great irritability of the stomach, which prevented the reception, or the retention of medicines. The first case which Dr. L. relates was one of the most hopeless and deplorable character. The face, neck, and chest were deeply livid—skin cold—fingers corrugated—hearing gone—voice inaudible—pulse imperceptible—thirst insatiable; but vomiting incessant, whenever any thing was taken into the stomach. In this forlorn condition, Dr. L. dissolved 30 grains of the nitrate of silver in three ounces of distilled water, which she swallowed at once. She lay quiet for six minutes, when she vomited up a small quantity of whitish turbid fluid, and then remained perfectly at rest for twenty minutes, when Dr. L. left her. In three hours he returned, and found that the patient had sunk into a kind of slumber, and had had no recurrence of vomiting. The other symptoms remained the same. She continued in this state till the next day, without sickness; but with intense heat in the stomach. She drank freely all the night of weak brandy and water, without rejecting any of it. Reaction took place, and she completely recovered. Dr. L. saw the patient for nineteen months afterwards, and she never evinced any symptom of gastritis or other affection of the stomach. In the second case 20 grains of the nitrate were given in an ounce of distilled water. Most of it soon came up; but the vomiting ceased, and recovery took place. The usual dose, however, was

ten grains to the ounce of distilled water. We think this document valuable, not only as respects the treatment of cholera; but as proving that the remedy, even in large doses, is unattended by danger.

OBSERVATIONS ON INTERNAL ANEURISMS. By Professor HARRISON, of Dublin.

The following observations are contained in a letter from Professor Harrison to Dr. Stokes, in the July Number of our Dublin contemporary.

“In alluding to the pain, among other symptoms attending internal aneurisms, I have remarked, that although it is very frequently stated that the degree of suffering attending thoracic aneurism is trivial, when compared with that complained of in a similar lesion of the abdominal aorta; yet exceptions not unfrequently occur. Thus, I have known cases of aneurism of the arch of the aorta to have been accompanied almost through their entire course with intense, though often intermitting pain in the region of the heart, in the spine, or through the chest generally, or in one or both arms; while, on the other hand, I have seen instances of this disease in which the suffering was so trivial, and the symptoms were so faintly and equivocally expressed, that the disease was not ascertained until the *post mortem* examination revealed its real nature. In forming our diagnosis, then, in suspected cases of thoracic or abdominal aneurism, too much importance or reliance is not to be placed on the mere circumstance of pain being either slight or absent, or intense and of almost continued duration. The change in a blood-vessel denominated aneurism is of slow progress, and unattended by acute inflammation; the arterial tissue, though peculiarly organized, is not very sensible to pain, or subject to acute disease, therefore aneurism is not painful *per se* but only in proportion as the tumor may interfere with some adjacent organ, or excite irritation in some contiguous

sensitive structure. Thus aneurism in the arch of the aorta may disturb the action of the heart, or may irritate the trachea, or by extending, compressing, or in any way disarranging the neighbouring nerves, such as the left recurrent, the phrenic, or the cardiac plexus, may give rise to severe paroxysms of pain, both local and remote; yet in other instances of disease in nearly the same situation, the tumour may so shape its course as to steer clear of any interference with surrounding objects, and thus avoid all excitement or irritation, or even interruption, to their functions, except so far as the latter may be impaired by the anormal condition of a vessel, whose integrity must be so very essential to the existence and well being of the economy at large. The same remark may apply to aneurism of the thoracic aorta in the posterior mediastinum; the tumour in some cases proceeds through all its stages to its fatal termination, without much accompanying local pain, or decided premonitory indications, whereas in other cases, acute spinal irritation, difficult and painful respiration and deglutition, are almost constant concomitants; attention to the anatomical connexions of the vessel in this situation, and to the different directions it may take in different instances, may explain the variety of symptoms that present in different cases.

The abdominal aorta is in connexion with several important organs through its whole course; it is also invested in *three-fourths* of its circumference with a plexus of nerves, branches of which extend along the different arteries to the several viscera. All the visceral arteries are remarkable in this respect, but more particularly the renal, gastric, and hepatic; one continued nervous network surrounds each from its origin to its final distribution. From these circumstances, we should expect that aneurism of the abdominal aorta, or of its branches, should be attended with much pain and functional derangement; and such is generally, but not uniformly, the case. I have witnessed the dissection of three cases of large aneurism which had burst behind the peritoneum, and

which, during life, had not been attended with much pain, or with any decided symptoms which could lead to a positive diagnosis. In each of these the tumour was connected with the posterior part of the artery; in one case it was situated close to the diaphragm, and the blood was partly injected into the posterior mediastinum, and partly into the abdomen, about the pancreas; in the second case, the tumour had burst into the cellular tissue round the kidney; and in the third case, the symptoms had been during life so similar to those of psoas abscess, that uncertainty as to the true nature of the disease occasionally existed—(See Surg. Anat. of the Arteries, vol. ii. p. 25.) Although I have not sufficient facts before my mind on which to ground the assertion, I should yet consider that when aneurism arises from the *forepart* of the abdominal aorta and extends into the cavity, pain, and more or less disturbance of the adjacent viscera, will be more likely to occur. The stomach I have remarked to sympathise extremely in these affections; hæmatemesis has frequently occurred during their progress, and in one case death immediately followed a copious vomiting of blood, which must have been supplied from the capillaries of this viscus, as the aneurismal sac had no communication with it, and had poured its contents in a totally opposite direction.

In speaking of abdominal aneurism, I am led to another remark which appears to me to present some interest, namely, that in the abdomen we frequently meet with aneurisms of the *smaller* arteries, not merely the coeliac axis, or the mesenteric, but of the gastric, splenic, hepatic, &c. I have seen examples of each of these. I also recollect a remarkable case, in which, on opening the abdomen, I was surprised at the livid colour and great size of the omentum; it was injected with grumous blood, from the arch of the stomach to near the lower border of this process. On careful examination I found it had proceeded from an aneurism of the left gastro-epiploic artery; the tumour was about the size of an

egg, and had given way by a sort of slough between the layers of the gastro-colic omentum; the surrounding parts were slightly thickened, but the stomach was free from disease, as was the peritoneum from inflammation. In the Museum of the College of Surgeons there is a specimen of aneurism of the coronary artery of the stomach. I have seen one case of aneurism of the right hepatic artery, including the root of the cystic; the tumour had not opened; the patient died of dropsy and disease of the heart; the gall-bladder was shrivelled and empty. I have dissected a case of large splenic aneurism which caused death by bursting behind the peritoneum: the spleen was unusually small. Many years ago I saw an aneurism of the right spermatic artery about an inch distant from the aorta; the testicle was of the usual size, and apparently healthy; the tumour was about the size of a nut, and had not caused any injury to the surrounding parts, though it is probable, had the individual lived for some time, it would have proved fatal by bursting. In the course of last winter, I accidentally found in the dissecting room an aneurismal tumour on the left renal capsular artery; the subject was a female, about eight or ten years of age; the tumour was solid to the feel, and on cutting into it was found filled with successive laminæ of fibrinous matter; very little cavity remained, so that the disease might be considered as undergoing a natural or spontaneous cure. Although aneurism is a disease common to all parts of the vascular system, yet it is certainly very seldom found in any of the external arteries, except the principal trunks, such as the carotid, axillary, iliac, femoral, or popliteal. I do not recollect any case of spontaneous aneurism in any of their smaller branches, though such are not unfrequent consequences of wounds or injuries; even in an artery of the size of the brachial, spontaneous aneurism is very rare. In the cranium it has been met with in the internal carotid, and in some of its primary branches; it has been also found, but very rarely, in the coronary arteries of the heart. It might prove an interesting inquiry to consider why the

small arteries of the abdomen more frequently present this disease than arteries of a similar size do in any other situation. Is the cause of this fact to be found in any peculiarity of structure, of course, of connexion, or in function? probably on each of these circumstances it more or less depends. As to structure, the abdominal arteries are certainly very weak, particularly their middle coat; hence their great liability to rupture in the common process of injecting the dead body. As to course and connexion, no vessels in the body are more remarkable for numerous turns, angles, flexuosities, &c., and most of them run very much unsupported, except by the general pressure of the parietes of the abdomen. In function, too, many peculiarities present themselves to our attention which may serve to explain the frequent occurrence of this disease in the abdomen, as well as the great liability of the mucous surface of the alimentary canal to severe and frequent hæmorrhage: thus, the quantity of the blood circulating through this cavity must be very considerable; the active function that is so frequently exercised in *different* parts of the apparatus must require a proportional supply of blood, so that increased vascular actions must constantly occur in different situations and in rapid succession. The very remarkable freedom of anastomosis between the several vessels may probably be designed to facilitate the more rapid course of the blood from one organ to another, according as the respective functions of either may require it. The irritability of the small vessels may be inferred from the great supply of nerves with which they are furnished. I have not sufficient facts before me to decide on the pathology of these small abdominal aneurisms. I have not observed any diseased condition of the coats of the vessel in the vicinity of the tumour, so commonly observed in thoracic aneurisms. From the observations I have made, which, however, are insufficient, I consider that they commence by rupture, and not by dilatation of the internal tunics.

Yours very truly,

ROBERT HARRISON."

In a commentary on the foregoing paper, Dr. Stokes applauds the ingenious explanation of Professor H. in respect to the comparative frequency of aneurisms of the internal and external vessels—namely, the sympathies of arteries with organs. This leads Dr. Stokes to notice a species of arterial throbbing, either in the abdominal aorta itself, or, as Dr. Houston supposes, in the second order of vessels. The nature of arterial throbbing is little understood. It has been described as a nervous phenomenon—as the result of pressure on the vessel—and as a kind of aortitis.

“But there is a pulsation of the abdominal aorta or its immediate vessels, which is symptomatic of inflammatory disease in the digestive system, and which a long experience enables me to say may be considered an important assistance in diagnosis. A throbbing generally commensurate with the disease; removed by treatment calculated to relieve enteric inflammation, and aggravated by every thing which will increase this affection. In other words, we may have from enteritis or peritonitis a throbbing of the abdominal aorta or its vessels, perfectly analogous to the morbid action of the radial artery in whitlow, or of the carotids or temporal arteries in cerebritis.”

The cases in which Dr. S. has most frequently observed it, are those of the gastro-enteric fevers of Ireland. Considering the latency or obscurity in which these fevers often exist, Dr. S. considers this means of diagnosis as a very important one. He does not mean to contend that this pulsation exists in all cases of gastro-enteric fever; but in many. It occurred also after corrosive poisons had been swallowed, and where the pulse was extinct at the wrist.

“In these cases we have frequently the following group of circumstances: fever, prostration, thirst, tenderness of the epigastrium or the ileo-cæcal region. The pulse at the wrist is often small and feeble, while the abdominal pulsations are comparatively violent. In most cases the other symptoms of gastro-intestinal disease are sufficiently plain. But in several instances this

want of proportion between the action of the radial and abdominal arteries, *combined with fever*, has been the principal indication of enteric disease.”

In some instances, he found that the pulsation was strongest in the direction of the right iliac artery, and subsided with the symptoms of the gastro-enterite. He has seen it with and without the occurrence of diarrhoea, and frequently re-appearing with relapse, errors of diet, or hypercatharsis. These circumstances, he thinks, may throw some light on the supposed cures of aneurism according to Valsalva's plan of treatment.

Our own experience entirely coincides with that of Dr. Stokes, in respect to epigastric pulsation—excepting that we are quite sure of having seen it arise from gastro-enteric irritation, as well as inflammation. We have seen it removed by tonics and sedatives. But the symptoms of irritation and inflammation assimilate so closely together, that it is often exceedingly difficult to draw the line of demarcation.

ON MANUAL ASSISTANCE IN ABORTION. By Mr. WAINWRIGHT, of Liverpool.

Mr. W. has published a paper on this subject in the 3d Number of the Liverpool Medical Journal, which deserves attention. Mr. W. does not advocate indiscriminate interference in cases of abortion; because, under proper treatment, the majority of cases will require no manual assistance. He properly observes, also, that “until every hope is lost of preserving the ovum, or until the condition of the parent demands energetic assistance, the adoption of manual aid would be altogether unjustifiable.” Mr. W. contends that, in all severe cases of abortion, the state of the os uteri should be ascertained, and that as early, and as effectually, as during actual labour. This examination is peremptorily required when the discharge goes on from day to day, confining the patient to bed, and blanch-

ing her countenance. The following appear to be the practical maxims laid down by our author.

1st. In many instances, a *separation and partial expulsion of the ovum* will be found; and very slight assistance, by moving it from side to side, and gently drawing forwards, will at once remove the whole from the orifice, and the hæmorrhage will immediately cease. Case No. 2 offers an example of what may be experienced under those circumstances. The assistance required in this case was certainly not slight, nor easily afforded, yet the end was fully attained, and no mischief occasioned. It will be observed, that I found it requisite to steady the uterus whilst I introduced the fingers through the orifice, and that this was effected by the left hand applied above the os pubis. I must add, however, that I do not think this plan will be effectual in every case, as in some individuals I have found it almost impossible to overcome the action of the abdominal muscles, especially of the *recti*. These seem to act, in some cases, almost involuntarily, when the hand is applied to the abdomen, whilst in others, the hand may be forced with little difficulty into the pelvis. The vagina, too, will offer some difficulty occasionally, and doubtless more when the patient has never borne children. It is unnecessary, however, to dwell upon this point, as it must be evident that unless the hand be allowed some degree of liberty in its movements, the operation in question cannot be effected.

2dly. The next two states I would allude to, are, first, where the *os uteri is found dilated, or dilatable, and a body is found projecting above*; and secondly, where the *os uteri is found dilating, and the membranes projecting*; especially during the continuance of a pain. These cases I believe to be, in many instances, the same, only in a different stage. I say, in many instances, because I am quite aware how often the tender membranes give away, allowing part of the conception to be expelled, whilst the residue remains. I class them together, however, because the same treatment is often required.

Should the symptoms not be particularly urgent, and especially if the pains be frequent, it may be well to wait a little, that, in the first case, the contents may be propelled somewhat lower, and that in both, if possible, the natural efforts may accomplish the expulsion. Under other circumstances, however,—as Cases No. 3 and 4 will shew,—manual assistance may be effectively and safely given.

3dly. It will sometimes be found, on enquiry, that a *fœtus has been expelled, but no secundines have been discovered*. Of course a most diligent search will be made for these, as it is very possible they may have been overlooked, or mistaken for a coagulum. Should the search however, be in vain, I could not acquit the practitioner of neglect, did he omit a vaginal examination, and were his patient afterwards to suffer from any of the effects of retained placenta. The decidua will often be found hanging at the os uteri; or if the pregnancy be rather more advanced, say about four months, it is not improbable that the funis,—or some apology for it, or a shred of membrane, or something,—may be suspended at the vagina, or at the os internum, and then the existence of something more within the uterus may well be inferred. Case No. 1 was of this description, and the treatment I adopted then I firmly believe to be the best that could be employed. The patient recovered extremely well. Some time had elapsed before I arrived, and I doubt not this explains the contracted state of the parts and the difficulty I had in extracting the portion which remained. I think, therefore, as little time should be lost as possible; and that a gentle and cautious effort should be made to dilate the os uteri, and to extract that which remains. In the later periods, at least, it may be remembered that the orifice has once been dilated to admit the passage of the fœtus, and surely little injury can be inflicted by distending it to the same extent, and often little more will be required. Here I would remark, that much misapprehension has been caused by this observation, 'that as before the 6th month the hand cannot be intro-

duced into the uterus, therefore no manual aid can be given before that period.' Now the truth is, that in the earlier months it is absurd to think even of introducing the hand. One, two, or three fingers are all that are required, and that are almost ever spoken of. Case No. 6 exhibits the fatal effects of allowing the placenta to remain. It is true, that in this case the first gush of blood might be sufficient to account for all the consequences, yet the subsequent losses must have contributed to the fatal result.

4thly. At other times, however, whether a portion of the embryo be expelled or not, a *rigid state of the os uteri* will be found, absolutely defying the most resolute to overcome it. One author, I find, confesses he could not succeed, though 'he tried with all his might, and repeated his efforts ten times!' This, it may be presumed, would oftener be found in first pregnancies, and here, I hope, no one will follow the example of this courageous practitioner. I may add, for the credit of modern obstetrics, it was not a modern accoucheur. This, then, is the case of all others for the tampon. I have never met with this case, and I must rely, therefore on the testimony of others. It is on this also that I rely, when I suggest, during the progress of such a case, the propriety of occasionally ascertaining the state of the os uteri. It may not be dilated at one visit, whilst it may be amply so at the next, and might then admit of manual aid.

LAMOTTE was called at two in the morning to an abortion of five or six months, from accident, attended with severe flooding. The os uteri was very rigid, but at six it was sufficiently dilated, and he effected the delivery. GIFFARD relates the case of a woman at about her sixth month, who had flooded for two or three days before he saw her. On the first day of his visiting her, he found 'the os internum not dilated enough to admit the end of one finger, and not easily to be dilated; on the second day she grew weaker, but still he could not dilate the orifice, but on the third day it was in a different

state, and he quickly delivered her, when the hæmorrhage immediately stopped.' The same author relates an interesting case (No. 153), advanced only to the ninth or tenth week. 'The woman had had hæmorrhage for some days, so that she was very much sunk, and had fainted several times. The os internum was very narrow, not allowing one finger to pass up; yet with the end of one finger he felt a soft substance within, lying at the mouth of the womb. She had much pain in the back. Three hours after, the orifice admitted one finger, which he passed directly through, and, bending its extremity, hooked out the contents, when all pain and flooding ceased.'

The above quotations, I think, will be admitted as warranting the practice I have suggested under this head, and may also be taken as strongly illustrative of the general question.

5thly. The above cases I supposed complicated with hæmorrhage. There is, however, another class of cases, unaccompanied with this alarming symptom, in which I believe manual aid may most advantageously be afforded. I allude to those in which the foetus has been expelled with *little or no flooding, but where the secundines (decidua or placenta) remain*. Cases No. 5 and 7 are instructive cases in point. The treatment adopted by Mr. PARK fully shews the practice usually employed, and this, with his observations attached, may, in the opinion of many, fully authorize its adoption in future. Few, I am sure, hold that excellent surgeon in higher estimation than I do, yet I cannot withhold expressing what I fully believe experience will justify me in stating. It is universally acknowledged amongst writers, that a woman is unsafe until the placenta is expelled, and who has not witnessed the uneasiness both of patient and friends until this is accomplished, proving a general consent to the same fact? In case No. 5, I left it, and the consequence was that it was detained two months, during which time the patient was never well; and at length it was expelled with a fearful hæmorrhage. In the sixth case it was left, and for six days both medical at-

tendants, patient, and friends were in constant doubt of something going wrong, but to our relief it was then expelled, a disgusting mass. These, however, I consider good escapes, rather than proofs of good treatment, because I find that reports of more serious consequences abound in the writings of those who have enjoyed the widest fields for observation. Dr. BURNS says, p. 297,

‘If the gestation has not advanced far, the placenta may be expelled in small portions for many months, but the patient is all the while languid, hysterical, and subject to irregularities of the menstrua, and very often to obstruction. But more frequently the symptoms are very acute. We have loss of appetite, prostration of strength, tumid or tender belly, frequent small pulse, hot skin, and various hysterical symptoms. The discharge from the vagina is abominably fetid, and hæmorrhage sometimes occurs to a violent degree.’

Mr. INGLEBY’s observations are to the same purport, and he relates a fatal case from the placenta being retained. (p. 118.)

SMELLIE gives a case from Mauriceau, vol. 2, p. 171, strongly proving the same point.

A woman miscarried at the fourth month, and the placenta was left entire. The midwife said the womb had closed, and she could not extract it. He saw her on the third day, and found her statement correct. He could not remove it. She was at the brink of the grave, from ‘a prodigious flooding.’ The placenta became putrid, and a most violent fever ensued, ‘accompanied with exacerbations two or three times a day, and with faintings and other symptoms usual on such occasions.’ The placenta was at length expelled, and the woman recovered.

Smellie mentions another example, which happened in the practice of one of his pupils. (Vol. 2, p. 167.)

The placenta was retained after an abortion at the fifth month. The patient was subject to constant draining for three months, until she became pale and emaciated. At this time he

visited her. The os internum admitted two fingers, with which he was enabled to separate a hard round substance from its attachment to the uterus, but could not bring it away. He then used a blunt hook, and removed it in three portions. The discharge ceased, the woman recovered, and afterwards bore children.

The above cases clearly prove the great importance, and, in my humble opinion, the absolute necessity, of removing, in all possible cases, the whole of the uterine contents; and here I must especially urge the removal being accomplished as quickly as possible. It is a remarkable, but a well-established fact, that the uterus and its orifice become almost permanently contracted very shortly after even a partial expulsion of its contents. Cases No. 1 and 7 in this paper show the strong tendency to this contraction, but other cases prove it completely. MAURICEAU mentions a person who miscarried at the sixth month; part of the after-birth remained, and before he arrived the os uteri was so closed he could not effect its removal. Dr. DEVEES dwells particularly upon this fact. (P. 414.)

I feel it, however, a duty to state, that Dr. DENMAN, who appears to be the oracle of British accoucheurs, and in many respects most deservedly so, does not advocate the removal of the placenta when retained after abortion. His concluding remark is as follows. (4to. ed. p. 490.)

‘At all events, much less mischief may be expected from the retention of a putrid placenta at this time, than from attempts to force it away by the medicines usually given for that purpose, or by manual assistance.’

I would simply beg to make this observation. I can find no argument to justify the use of ‘force’ in this case, but between the mischief arising from a judicious endeavour to remove a retained placenta, and that arising from a putrefying substance within the Uterus, an organ possessing sympathies so numerous and so important, I leave the reader to decide.”

The cases themselves we are unable to insert, and they cannot be abbreviated.

**CREPITATIO MUSCULORUM—A NEW, OR
VERY RARE AFFECTION.**

We have recently seen a very remarkable instance of this curious complaint. A lady of distinction and title, aged between 60 and 70, had enjoyed the most perfect health till within these few years. About that period she experienced some anomalous feelings about the head, indicative of fulness of the cerebral vessels, and these were accompanied and followed by certain vitiations of the senses of tasting and smelling. These symptoms she disregarded, her health being, in other respects, pretty good. Gradually, however, she began to perceive a weakness in the left lower extremity, with some uneasy sensations in the line of the sciatic nerve between the hip and the knee. This debility steadily increased, during the last twelve months, and she is now obliged to go on crutches. The muscles of the thigh, but not of the leg, are flabby and a little wasted. She can move the extremity in every direction; but has not the power of leaning in the slightest degree upon it. The most singular phenomenon, however, is this;—that, whenever she either bends or extends the knee, a crackling noise is distinctly heard, even at a considerable distance, along the course of the rectus femoris muscle, exactly resembling the cracking of fingers when stretched. The action of flexion and extension is accompanied by painful sensations in the rectus femoris, the two vasti, and the cruræus. When at rest, she feels no pain. Mr. Brodie and the senior Editor of this Journal examined the thigh with the greatest care. The ear was repeatedly applied along the muscles above-mentioned, and the crackling noise was loudly heard. As the ear approached the knee-joint, the noise diminished, and it was perfectly evident that the sound did not proceed from the joint, but from the muscles of the thigh. In the whole course of his experience, Mr. Brodie never met with but one case at all resembling this. It was a gentleman who complained to him of such strange and anomalous sensations about the right shoulder and side of the back, that he

thought for some time the gentleman was hypochondriacal, and fancied a host of morbid and unintelligible feelings. In one of his visits the patient asked Mr. Brodie what could be the cause of the cracking noise in his back. Mr. Brodie had not been made acquainted previously with this symptom. But the patient soon convinced him of its reality; for, on moving the arm up and down, there was a cracking noise emitted from the muscles about the shoulder, and especially the latissimus dorsi, so loud that it could be plainly heard even in an adjoining room. Mr. B. examined with the ear, and clearly ascertained that the noise proceeded from the muscles, and not from the shoulder-joint. In this case there was no diminution of muscular power, but only painful sensations. The gentleman, in the course of some years, got rather better; but Mr. B. lost sight of him, and the final result is not known. In respect to the lady, various means had been used, and half a score of physicians and surgeons had been consulted, without the slightest benefit. She was finally recommended to go on a tour up the Rhine in August of the present year, more to divert her mind, and give a fillip to the general health, than with any prospect of recovery from the local complaint. She had heard so much of the "Bubbles of the Brunnens," that she was anxious to try their efficacy. They will probably burst and leave no mark of their power behind.

What is the nature or the cause of the phenomena above-mentioned? We believe it would puzzle a Philadelphia lawyer to solve the problem. For our own parts, we are completely *pozed*—and we shall not trouble our readers with any of the hypotheses we have formed to unriddle the mystery. The lady, who is very intelligent, says that she feels as if the muscles were dry, and snapped or cracked, with some pain, when she puts them in motion. By the way, can any one explain the cracking of the finger-joints when forcibly extended? It rarely happens that a joint can be made to crack more than once, however often the extension may be repeated at that time. Is it the for-

cible separation of articulating surfaces that were in perfect contiguity? All separations of such surfaces produce a noise. But why can it not be repeated till after a period of time? We shall keep an eye to the case above-mentioned, and communicate the result to our readers.

HYDATIDS OF THE KIDNEYS PASSED BY THE URETHRA.*

Elijah Jones, æt. 27, a comb-maker, of pale complexion and slender form, applied to Dr. DUNCAN on the 13th May. He brought with him several portions of a membranous-looking substance, having a pearly, semi-opaque, pulpy appearance, and which he said he had passed with his urine three days previously. He stated that he made water rather oftener than usual, and sometimes with difficulty; and that he had a constant shooting pain in the perineum, which was increased after micturition. He had also occasionally a sense of 'weakness' in the right lumbar region. Urine of natural appearance; and functions natural.

On examining the substances above-mentioned, one was discovered of a globular shape, and about $1\frac{1}{4}$ inch in circumference,—evidently an Hydatid, of the genus *Acephalocyst*. It was filled with a transparent fluid, having floating in it another very small hydatid, which gravitated in the surrounding fluid. The remainder of the substances consisted of the coats of seven or eight hydatids which had burst, and which, when filled with water, varied in bulk from the size of a pea to that of a pigeon's egg.

He stated that, seven months ago, he got a "bad cold," and suffered from pain above the right hip, and in the perineum; and that five months ago, a blister was applied, which removed the pain above the ilium, but that he still feels occasional uneasiness there.

About a month ago, he passed several hydatids, which caused some obstruction to the flow of urine, but no more appeared until three days ago, although during the last month he has had constant pain in the perineum, apparently near the neck of the bladder.

He was ordered to take *diluted Muriatic Acid*, 12 minims three times a day.

16th. Another hydatid has been passed (burst.) The pain is nearer the end of the penis.

24th and 25th. Two more hydatids passed, which obstructed the urine for some time. No pain in the perineum now; it is generally felt six or seven hours before the hydatid is expelled.

June 3d. No more hydatids have appeared. Complains only of weakness in the back and hip.

The above case is interesting from the extreme rarity of its occurrence. Dr. Craigie says, "that the uterus is the only cavity, with mucous surface, in which inspection shews that hydatids have been found:" and there can be no doubt that, in this case, they were formed in the kidneys, and probably increased in size after their descent into the bladder.

The following account of the *post-mortem appearances* in one of the few instances of the kind on record, is taken from the *Philosophical Transactions* for 1687. Dr. Tyson, in stating what was observed in the bladder, says, "therein, upon Apertion, we discovered a very strange sort of Cystes or Bags, of the exact Figure of Eggs, of several dimensions, some larger than Goose Eggs, others as big as Hen Eggs, to the number of twelve in all; and about eight of them whole and replete with a limpid Serum; . . . all of them loose and free, without the least adhesion, either to one another or to the Coat of the Bladder . . . nor could we imagine that this miserable patient could possibly make any Water but what happened upon the breach of some of these watery Tumours, when the Bladder was crouded beyond its dimensions. . . . The Ureters were of the largeness of the Small Gutts in Children, so that they could easily admit two fingers into their

* Liverpool Medical Journal, July, 1834.

Cavity One of the *Vesiculæ* being opened, had a large cluster of small *Ova* as big as Grapes, all replete with Liquor. All the rest contained nothing but *Serum*." Two small ova were observed at the entrance of each Ureter, having descended from the kidneys.

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OBSERVATIONS ON CATARRHAL AND
CATARRHO-RHEUMATIC OPHTHALMIA.
By FRED. TYRRELL, Esq.

In our quarterly contemporary for July last, there is a good practical paper on the above subject, from the pen of a good practical surgeon. Mr. Tyrrell remarks that, during the concluding part of last Winter, and up to July of the present year, catarrhal ophthalmia has been more prevalent than he ever knew it to be. The disease was often so severe as to affect the sclerotic as well as the conjunctiva. The following is Mr. Tyrrell's description of the—

CATARRHAL OPHTHALMIA.

"It commences with stiffness and heaviness about the palpebræ, with slight irritation or itching of the ciliary margins, and a sensation as if some fine particles of dust had lodged on the surface of the globe; there is usually slight intolerance of light, with increased secretion of tears and agglutination of the lids during sleep. After a short time the patient experiences pain, which is increased by motion of the eyelids, or by exposure to bright light. These symptoms are aggravated about sunset.

On examining the eye, there is perceived in the early stage slight thickening and redness at the free margins of the lids, and probably some coagulated secretion collected at the inner canthus and about the cilia. The ocular portion of the conjunctiva exhibits a few tortuous vessels filled with red blood, whilst the palpebral portion is red, tumid and villous, like crimson velvet; and in the lower folds between the ocular and palpebral parts of the membrane a little whitish or slightly

yellow and thick mucous secretion is lodged.

The inflammation, however, soon spreads to the ocular conjunctiva, the vessels of which become extensively injected with red blood, and, on close inspection, are found to form a beautiful net-work. In severe cases, the conjunctiva is partially thickened and elevated by deposition of serum between it and the sclerotic, constituting a partial chemosis, and occasionally small spots of ecchymosis are perceived from the rupture of some minute vessels.

If the disease extends farther, it produces ulceration of the cornea.

This ophthalmic disease seldom exists without some symptoms of general catarrh, such as headach, sense of fullness about the frontal sinuses, sneezing, increased secretion from the nose, and some general febrile symptoms: the local and general diseases are usually reciprocal.

In young subjects the catarrhal-ophthalmia is often modified by a strumous diathesis, which occasions the local affection to be more severe, augments especially the intolerance of light and lachrymation, and disposes to the formation of pustules.

This disease may occur at any period of life. It is produced by a peculiar state of the atmosphere, during the continuance of which there is considerable difficulty in entirely removing the ophthalmia.*

The treatment must be modified by the severity of the symptoms, the extent of the constitutional disturbance, and the condition of the general power.

"When there is simply affection of the palpebral conjunctiva with morbid mucous secretion and little general disturbance, and sufficient constitutional power, I prescribe a brisk aperient of calomel and colocynth, or calomel and rhubarb, or jalap, and afterwards a small quantity of some of the preparations of mercury with antimony, or with Dover's powder at night, and a mild saline aperient in the morning, also mild diet, principally vegetable and fa-

* MED. QUART. REV. No. IV. p. 416.

rinaceous, with quiet, and the avoidance of cold or damp, or of bright light.

Locally, I employ merely tepid water, to cleanse the eyes; or warm water to foment them when uneasy, and some simple ointment, which should be smeared upon the lids and eyelashes before the patient goes to sleep.

When the local disease is acute and the constitutional affection considerable, general or local bloodletting must be resorted to; the former being only necessary in persons of naturally full habit or subject to inflammatory diseases; and after bloodletting the treatment above described will be applicable.

In a few days the mild or acute form, if treated as I have described, passes into the chronic stage, which is denoted by a general mitigation of symptoms, but more especially by an alteration in the mucous secretion, which becomes thin and pale, and by the change in colour of the conjunctiva, which loses its brilliant aspect, and presents a more pale and lax appearance; at the same time it is found that the general power is failing under the continuance of the constitutional affection; the treatment must therefore be changed. Instead of exciting the secretions, they must now be kept as near as possible in their natural state, and a more generous diet must be allowed, but still the patient must abstain from such food as may tend to excite vascular action. It is necessary, in persons of feeble power, to give, in addition, some medicinal stimulus, as some of the preparations of bark, mineral acid, or ammonia.

To subdue the remains of the local disease, a slightly astringent lotion must be substituted for the tepid water, as a solution of the acetate of lead, half a grain, or a grain to the ounce; or a solution of alum, a grain or two grains to the ounce; the sulphate or acetate of zinc, a quarter or half a grain to the ounce, or nitrate of silver in the same proportion. Also a stimulating ointment must be applied instead of the milder form, as the dilute citron ointment composed of half a scruple or a scruple of the unguentum hydrargyri nitratis, to two drachms of unguentum

cetacei, or a scruple of the unguentum hydrargyri nitrico-oxydi to a drachm of the unguentum cetacei."

Where a strumous diathesis prevails, and where, as was observed, there is much intolerantio lucis, counter irritation by blisters is necessary. The intolerance exists both in the acute and chronic form, which renders it difficult to distinguish between them, though it is necessary to discriminate in the treatment. Mr. T. is convinced that more benefit results from repeated blisters, than from keeping one open. Cold applications are injurious to the eyes of strumous children. He uses tepid water in the acute stage, and trusts to general remedies in the chronic. We now proceed to the—

CATARRHO-RHEUMATIC OPHTHALMIA.

"This affection commences with symptoms similar to those of the catarrhal, but with more early suffering: for in addition to the symptoms of the catarrhal disease, the patient experiences a constant dull aching pain in the globe of the eye, and in the temple and eyebrow: the globe feels tense, and as if it had been bruised; and these pains and sensations become so much augmented towards evening as to prevent sleep. The accession of pain is accompanied with intolerance of light and a feeling of dryness of the conjunctival surface, so that the motions of the eyelid upon the eye produce excessive pain; but occasional gushes of tears occur, which for a few moments produce some relief; while the symptoms continue thus acute, the globe of the eye, the temple and eyebrow, are extremely tender to the touch.

In the intervals between the severe attacks, when there is but slight intolerance of light, vision is frequently indistinct, and occasionally small black spots or muscæ are perceived by the patient.

On superficial inspection of the eye, the appearances denoting catarrhal ophthalmia of an acute kind are apparent; such as the red palpebral margin, the thick mucous secretion, the

thickened and villous state of the palpebral conjunctiva, with the tortuous vessels and vascular net-work on the ocular portion of the membrane; but an attentive examination soon discovers that the colour of the ocular conjunctiva is more uniform and deeper than in the simple catarrhal disease: and this upon further observation is found to depend upon the existence of another set of minute vessels filled with red blood, which can be traced in the intervals between the tortuous vessels of the conjunctiva as passing beneath them in a straight course from the margin of the cornea towards the orbit; these vessels are situated in the sclerotic coat; they are occasionally found more abundant in one part than another; as, for example, more upon the nasal than the temporal side of the cornea, and of course augmenting the depth of colour in such particular situations: it requires therefore a careful examination of the whole ocular surface to detect them.

When the vision is affected, being cloudy or troubled with *muscæ*, some change is perceptible in the iris; its pupillary aperture is contracted, its brilliancy is diminished, or its colour slightly altered; which circumstances are best detected by comparing the iris of the affected eye with that of the healthy organ: the motions of the affected iris also are sluggish. The iris suffers in consequence of inflammation extending to it from the sclerotic.

Sometimes a partial or complete ash-coloured line is seen between the cornea and vessels injected with red blood, most frequently the line forms a complete circle around the cornea; but I have seen it merely occupying a portion of the circumference of the cornea, being apparent at its temporal and nasal margins, and deficient superiorly and inferiorly. This appearance is considered by the continental and also many of our own ophthalmic surgeons, as a diagnostic of rheumatic inflammation. Such opinion, however, I consider to be erroneous, for I have seen a similar line present in iritis, simple scleritis, and choroiditis. I believe it results from the mode of junction between the sclerotic and cornea, occurring when

any of the diseases alluded to are present, and seen most distinctly when the junction of the two structures is very oblique, but not at all evident when the textures are joined with little or no obliquity. Now and then the margin of sclerotic overlaps or joins obliquely the circumference of the cornea, more in one part than another, and this I have observed most frequently on the temporal and nasal sides, so as to make the transverse diameter of the cornea less than the perpendicular diameter. When such formation exists and inflammation affecting the sclerotic occurs, the ash-coloured line is apparent only towards the nose and temple."

The exciting causes are cold and moisture; and Mr. T. suspects that the simple catarrhal affection is often converted into the rheumatic, by the injudicious application of cold lotions.

TREATMENT.

When inflammation preponderates in the conjunctiva, and the sclerotic is but slightly affected, leeches must be applied, and brisk purgatives given. For a few days, Mr. T. employs the same means as in the simple catarrhal affection, excepting that, when the circum-orbital pains are severe, he directs blisters, or a few grains of mercurial ointment, with opium, to be rubbed on the temple and forehead at night. As soon as the severity of the conjunctival affection has subsided, he prescribes a more nutritious diet, and small doses of cinchona and soda, sarsaparilla and lime-water, or some mild tonic with an alkali. Locally, warm water is occasionally used to cleanse the eye; "but the patient must carefully wipe it, and not allow the surface of the lids to remain moist, as I am confident it augments the mischief." The repetition of blisters is serviceable where there is much *intolerantia lucis*, or continual circum-orbital pains. When irritability, with little vascularity, remains, a drop or two of *vinum opii* once or twice in the 24 hours, dropped into the eye, is useful.

"If the catarrhal affection of the conjunctiva be slight, and the inflam-

mation of the sclerotic severe, without, however, much affection of the iris, local bloodletting is rarely necessary. The patient is at first to be freely purged by some drastic medicine, after which a full dose of colchicum, with a narcotic, may be given, especially when there is any marked rheumatic diathesis: the best period for administering this dose is in the evening, a short time before the usual period of exacerbation. I have known it to subdue altogether the sclerotic inflammation, leaving but a slight catarrhal ophthalmia. If the first dose appears to alleviate the disease, it may be repeated every six or eight hours for three or four times; but I have never found any benefit from a longer continuance of this remedy, nor have I seen much advantage from it when it has occasioned disturbance of the stomach or bowels. I consider its beneficial action very uncertain.

Otherwise, I prescribe according to the state of general power, which it is of the utmost importance to observe, in order to treat successfully. Very often, when the local disease appears acute, the general power is extremely feeble; or, on the contrary, when the local disease is slight, the constitutional power is good; but occasionally, the general action is energetic when the local disease is severe. When the action of the heart and arteries evinces deficient power, although the local symptoms and appearances may indicate an acute form of disease, any active depletion likely to affect the system ought not to be adopted; blistering is the best means of relieving the local congestion; besides which, medicines should be given to correct any error in the principal secretions, especially those of the bowels, skin, and kidneys: the two latter I find most frequently to be deranged. Antimonials with salines, are therefore most serviceable after the bowels have been acted upon. The patient must be allowed a good nutritious diet, and even a small quantity of stimulus, if much addicted previously to its use.

As soon as the secretions are in a healthy condition, tonics should be exhibited, and if the general power is good I prescribe five grains of the pul-

vis cinchonæ, and an equal quantity of the sodæ subcarbonas exsiccata every four or six hours; and I know of no remedy so generally serviceable in the state of the disease above described. I am indebted to Mr. Wardrop for the suggestion of this medicine. I have frequently known it succeed in relieving inflammation of the sclerotic, when the larger doses of the same preparation have been taken some time without benefit. Should this remedy fail, I give the sarsaparilla with lime water, but with either medicine it is necessary to administer an occasional purgative, with or without some mercurial, according to the state of the biliary secretions.

When the patient's power is feeble, I usually commence with the sulphate of quinine, as a tonic, in doses of three or four grains every four or six hours; and if there is a disposition to inordinate cutaneous secretion, I prescribe, in addition, twenty or thirty minims of the dilute sulphuric acid. Under these circumstances, also, a generous diet is requisite, and a moderate quantity of any stimulus to which the patient may have been accustomed. I have lately seen many cases in which the catarrho-rheumatic disease had continued (principally however of a rheumatic character) for six or seven weeks, or more; a depletory treatment having been persisted in, and in which a cure has been effected in as many days after the tonic plan has been adopted.

It sometimes happens that the disease has extended from the sclerotic to the iris before the patient applies for relief, or that the affection being treated under the supposition that it is merely a conjunctival inflammation, the remedies employed have not been sufficient to prevent the extension of the disease to the iris. Inflammation of the iris is indicated by a loss of brilliancy, an alteration in colour, a thickening of the pupillary margin, and a contracted and sometimes irregular condition of the pupillary aperture. When the iris is but slightly diseased, there is no occasion to deviate from the treatment which I have just described; but if the inflammation of this texture is decidedly developed, it is absolutely necessary to

resort to mercurial treatment to stop its progress, otherwise the plan of depletion which I direct in the early stage of catarrhal or simple catarrho-rheumatic ophthalmia, may not arrest the inflammatory action in time to prevent deposit of lymph in the texture of the iris and in its pupillary margin, by which the pupil may be rendered permanently irregular, or its margin become in part adherent to the anterior capsule of the lens, and the transparency of the capsule itself be materially injured.

The exhibition of mercury must be carefully and guardedly resorted to, especially when the constitution is feeble, which I have observed it most frequently to be in persons suffering from this disease; nevertheless I deem the use of the remedy of the greatest importance, if given in small doses, at short intervals, whilst the patient is allowed a nutritious diet, and the secretions kept in good order; the surgeon may, by keeping a careful watch, always stop the exhibition of the medicine in time to prevent any mischief.

At the same time that mercury is given, the extract of belladonna should be applied to the eyebrow night and morning, to keep the pupil in a dilated state, and prevent any adhesions taking place between the pupillary margin of the iris and the anterior capsule of the lens, with a contracted pupil; or to aid in the separation of such adhesions, should they have been formed previously.

The mercurial treatment must be stopped as soon as the inflammation of the iris subsides, whether the system be affected by the remedy or not. I have seldom had occasion to give mercury so as to produce any marked effect on the system in these cases, and have always found that when the remedy has by accident, or inattention, created much general disturbance, the cure of the remaining disease in the sclerotic has been more difficult. The disease in the iris being subdued, the plan I have recommended for relieving the inflammation of the sclerotic should be immediately adopted.

In several instances which have come

under my observation during the last few months, although the general and local diseases have not been very severe, the patients have experienced excessive debility, and have not recovered until they have had the benefit of change of air for a short time.

I have been desirous to shew, in the preceding observations, that it is of much importance, by careful examination of the organ and attention to symptoms, to ascertain the extent of disease before treatment be commenced, and that the treatment must be varied according to the extent and severity of the inflammation; but especially to point out the existence of apparently severe local inflammation, with a feeble state of the constitution, which I have observed frequently during the late prevalence of these diseases; for I am satisfied that inattention to this circumstance has been the principal cause of want of success in the management of most of the cases which I have seen in consultation."

We have thus laid the whole substance of Mr. Tyrrell's paper before our readers, as it will prove serviceable to the practitioner in the daily rounds of his avocation.

RESEARCHES ON THE DIAGNOSIS AND PATHOLOGY OF ANEURISM. By Dr. W. STOKES.

[Dublin Journal, July, 1834.]

This is a long and valuable paper, and relates, of course, to internal aneurisms; it is, therefore, in the domains of the physician. We shall, in imitation of the author, proceed at once to the cases.

CASE 1. *Aneurism of the Hepatic Artery—Jaundice—Death.*

S. Mears, aged 35, of regular habits, but who had had an attack of apoplexy, was admitted into the Meath Hospital, 7th August, 1832, in a state of complete jaundice. Nine weeks previously he was attacked with copious hæmatemesis of five days duration. The yellowness commenced nine days before he entered the hospital. He had yellow vision,

with nausea, thirst, and some epigastric pain, with pulse 112, and the fæces and urine as in jaundice. The left lobe of the liver could be felt much enlarged, and also the right, whose edge stretched down to the umbilicus. Two inches to the right of the umbilicus was felt a soft pyriform and fluctuating tumor, considered to be the gall-bladder distended. In this state he continued for nine days, when he became covered with a miliary and afterwards a petechial eruption. In none of the examinations did they detect any pulsation in the tumor. On the 17th of August he was sitting up in bed, when he fainted, and suddenly expired.

Post-mortem Examination. On opening the abdomen a layer of recently coagulated blood covered the surface of the intestines. The liver was found to be small, and beneath its thin edge were seen two projecting tumors—one, the gall-bladder enormously distended—the other occupying the notch in the anterior edge of the liver, the size of an orange, roughly coated with cellular membrane, and without fluctuation. The liver had been pushed from behind forward by these tumors, giving it the enlarged appearance in the living body. The aorta was carefully examined, and found to have no communication with the tumor. A rigid investigation was then made by several medical gentlemen, and the tumor proved to be an aneurism of the hepatic artery covered by the capsule of Glisson, and so situated as to pass directly under the bile ducts. The opening of the vessel was a well-defined slit, and seemed to be the result of a perfectly local disease. The state of the biliary ducts throughout the liver, being enormously dilated up to the point of obstruction. The larger ducts would admit the point of a man's thumb. The dilatation continued to the peritoneal surface of the liver, forming numerous projections, varying from the size of a walnut to that of a pin's head, apparently by the distention of their ultimate ramifications. They contained bile, which spirted out with force when they were opened. The substance of the liver was

soft and friable. No disease in any part of the gastro-intestinal canal.

Dr. Stokes has made some ingenious observations on the above very curious case, especially as respects the diagnosis. We much doubt whether any of the phenomena recorded in this instance will enable us to ascertain an aneurism of the hepatic artery in the living body; but the case itself is important, as shewing how easily we may be deceived as to enlargements of the liver, by the existence of tumors in its vicinity. There is one observation in these remarks which struck us forcibly, and not without some sense of humiliation. "I feel little doubt (says Dr. Stokes) that the violent impulse of the heart in phthisis is, to a certain extent, produced by the circumstance, that the lung has lost much of its elasticity, and thus offers greater resistance to the motions of the heart." For the edification of the young pathologist, we candidly confess that we have many times pronounced disease of the heart, when, on dissection, the heart was sound, and the neighbouring lung was the seat of disease. It is more difficult to discriminate between increased action and increased structure in the central organ of the circulation, than most pathologists imagine. The longer we have lived, the more convinced are we of this difficulty; and scarcely a day passes without offering us examples where we are at a loss to say which of the two states is the cause of the phenomena presented to the senses by auscultation. Let this confession from a senior in observation, moderate the pride and increase the assiduity of the junior pathologist!

CASE 2. Aneurism of the Arteria Innominate.

This was a shoemaker, admitted into the Meath Hospital, 29th Dec. 1833, being 34 years of age, stout and muscular. He complained of cough, dyspnoea, pain in the chest and head. Next night he was seized with hemiplegia of the left side. The symptoms above-mentioned came on five weeks previously, after exposure to cold. On ex-

amination the chest sounded well over its whole extent, excepting at the sternal extremity of the right clavicle, where it sounded dull. The respiration was intensely puerile in the left lung—exceedingly feeble in the right, but without r  le. On applying the stethoscope to the sternal extremity of the right clavicle, a very loud double pulsation was heard, with strong impulse, diminishing in intensity as the heart was approached, the sounds and impulse of which were natural. On pressing the fingers behind the clavicle, a small pulsating tumor could be felt in the direction of the arteria innominata. No *bruit de soufflet* could be detected in any part of the chest.

The symptoms were materially relieved by local bleeding, cold applications, purgatives, &c. but on the 5th January last, the symptoms became all aggravated, and he was attacked with diffuse cellular inflammation of the integuments of the neck, extending from the clavicle to the inferior maxilla. The swelling was soft and elastic, very tender, and with distinct crepitus. The face was livid and swollen, and the veins of the head and neck much gorged—the breathing was laborious, and there was loud tracheal r  le. By various and judicious means the symptoms were alleviated from time to time; but he ultimately sunk on the 17th February, 1834, after the physical lesions had become multiplied and extensive. The tumor above the clavicle had attained the size of a hen's egg—dullness of sound extended over a great part of the anterior of the right side of the chest—pectoriloquism was decided in the tumor—and there was intense bronchitis in the left lung—breathing stridulous—voice often inaudible—headach, which was a constant symptom.

Dissection. Much fluid between the membranes of the brain, and an abscess in the right hemisphere, containing an ounce of matter. The right lung was collapsed, and reduced to a dark carni-fied mass. Strong adhesions, and much fluid between the pleur  . The left lung was very voluminous, and its tubes filled with mucus. Two ounces of se-

rum in the pericardium. The aorta was diseased, being somewhat dilated, and its coats thickened, the inner one being nodulated, and speckled with yellow spots. The aneurism was of the arteria innominata, the whole front of which artery was destroyed, and replaced by the wall of the sac. The posterior half was sound. The aneurism rose at first narrow, but gradually increased in bulk till it equalled a large cocoa-nut, the walls being of irregular thickness. It was filled with large fibrous and laminated coagula. By its pressure it had so flattened the right side of the trachea, that the free margins of the cartilages overlapped those of the opposite side, and almost annihilated the calibre of the tube. The right carotid and jugular vein, on the posterior surface of the sac were flattened and obliterated. The vagus nerve was also flattened, and its fibres were vascular. The right and left ven   innominat   were flattened and completely obstructed.

Dr. Stokes gives an admirable exposition of the symptoms during life, as explained by the *post-mortem* examination. We regret that our limits prevent us from giving more than one passage which, however, conveys a very valuable hint to the pathologist, and especially to the zealous auscultator.

“Let us now consider the symptoms as connected with the chest. One of the most remarkable of these, was the difference of the intensity of respiration in the two lungs, the sound of percussion of which was every where clear, except in the immediate situation of the aneurism. This circumstance, arising from the compression of one bronchus, seems to me a most important one in the diagnosis of thoracic aneurisms, and one to which sufficient attention has not been paid. In the case to which I before alluded, published by Mr. Porter, this phenomenon was well marked, and was in truth the only unequivocal sign of any tumor existing in the chest; and there is at present a patient in the hospital labouring under many symptoms of aneurism of the aorta, though no external tumor is perceptible and who presents this sign

in a most remarkable manner. When we consider the difficulty that has hitherto been attendant on the diagnosis of thoracic aneurisms, *previous to the appearance of tumour*, any additional sign must be considered as of great value. I have no doubt that this one will in many cases prove highly valuable. The observation, too, may to a certain degree apply to the diagnosis between chronic laryngitis and the pressure of tumours external to the tube; for if, previous to the occurrence of the stridulous breathing, this difference of respiration has been observed in the lungs, a difference inexplicable by any result of percussion or auscultation of the respiratory murmur, it will give almost a certainty that the symptoms are not the result of original laryngeal or tracheal disease, but of gradually increasing pressure, first upon one bronchus, and afterwards on the trachea itself."

We fear that the diagnosis of thoracic aneurisms will ever remain obscure, on account of the various directions which the tumor may take, and the different sensibilities of the parts incommoded. The foregoing case, however, which we recommend in the original to every pathologist, exhibits a striking example of the accuracy of diagnosis by the stethoscope, in respect to the lungs, pleura, &c.

CASE 3.—Dilatation of the ascending Aorta—Death by Rupture.

A man, aged 30, was admitted Jan. 18th, 1831. In the preceding September, he had had a fall on his right side, succeeded by pain in that situation. A month afterwards, he became affected with a sharp pain in the upper part of the *left* side, which continued for some weeks, when he perceived a pulsation between the cartilages of the second and third ribs, from which time the thoracic pain diminished. A flat-tish tumor was now felt extending from the second to below the third rib, presenting a double pulsation, closely resembling those produced by the action of an excised heart, and without any *bruit de soufflet* or *rape*. He had no dyspnœa in the erect position; but dif-

ficult breathing the moment he lay down. The stethoscope detected nothing unnatural in the heart or lungs. *Low diet, bleeding, digitalis*. He improved till the latter end of February, when he was attacked with severe pain in the chest, numbness of the left arm, and inability to lie on the right side. Some relief was obtained by local bleeding and by blistering; but he was unable to use the recumbent posture. The double pulsation could be plainly felt. A bleeding from the arm relieved the pain, and enabled him to lie down. He continued in this state till the 11th of April, when he suddenly expired.

On dissection, the ascending aorta was found to be greatly dilated, the dilatation commencing at the semilunar valves, and terminating at the origin of the innominate. The tumor adhered to the left side of the sternum, and to the cartilages of the second and third ribs. It was about the size of a goose-egg. It had ruptured into the pericardium, which was found distended with coagulated blood and serum. The heart itself was healthy, and the lungs crepitating.

CASE 4.—Aneurism of the Thoracic Aorta, without external Tumour, recognized during life.

P. Walsh, aged 26, was admitted 23d July, 1832, complaining of cough and dyspnœa, to which he had been subject for nearly two years, but much aggravated within ten days. His neck was generally enlarged as if a tippet had been put round it; the jugular veins being turgid and tortuous. He had short cough, and mucous expectoration, with stinging pain in the right shoulder—pulse 100—impulse of the heart slightly increased, and its sound heard over a large portion of the chest. On the left side some *bruit de rape* accompanied the first sound of the chambers. The anterior portions of the chest were less sonorous than natural. In the right subclavicular region, the respiration was feeble, with a slight mucous râle—in the left lung, the respiration was puerile. "On laying one hand over the right scapula, and the other under the clavicle, a distant though distinct impulse

could be felt, apparently synchronous with that of the radial artery." The patient had some dysphagia.

Connecting the foregoing phenomena with the history of the case and the auscultic indications, Dr. S. came to the conclusion that, in all probability, there was aneurism of the arch of the aorta. He was treated by small bleedings, local and general, and was so much benefited that he left the hospital. Soon afterwards he got ill, and went into another hospital, where he died suddenly; and, on dissection, an aneurism of the arch of the aorta was discovered. It had burst into the pleura.

Dr. Stokes has appended some good remarks on the subject of internal aneurisms generally, and the signs by which they may sometimes be recognised, for which we must refer to the paper itself. Dr. Frazer has also communicated two or three cases of aneurism from his military experience, of which we shall not be able to give a satisfactory account, in consequence of our closing limits.

The first case was that of a British soldier, who came into hospital complaining of violent pain in his back, particularly along the spine, but without any morbid signs of local or constitutional illness. His health appeared good, and there was no emaciation. Some trifling remedies were prescribed, and it was suspected that he was feigning. He left the hospital, but again returned, and again the medical attendants were puzzled and suspicious.—They were not a little alarmed and mortified, however, on learning that the poor fellow dropped down dead, a few hours after he came into the hospital.

On examination, a large aneurism of the abdominal aorta was found ruptured, the bodies of the adjoining vertebrae being carious.

The second case was that of a gentleman, aged 30, who was attacked in the latter end of 1830, with derangement of bowels, followed by the feeling of a tumour in the left hypochondrium extending to the groin, with weakness and pain in the back. These symptoms increased, till at length a pulsating tumour appeared in the postero-inferior

portion of the left side, which rapidly increased in size. As the case was considered to be aneurismal, Valsalva's system was adopted. His sufferings were increased so intolerably that he wished for death. On one occasion, in a fit of despair, he entered a tavern, ordered a sumptuous dinner, and drank a pint of wine, which was followed by a cessation of his distressing symptoms for several days. He always found that low living increased his sufferings. Dr. Frazer was unable to detect any tumor in the side. He became affected with atrocious colics—his legs swelled—and he died. On examination, a large fluctuating tumor was found extending from below the left scapula to the last rib. The left pleura was filled with coagulated blood, and its separated serum. This had compressed the lung, and displaced the heart to the right side of the chest. In the lower portion of the pleural cavity was perceived the ruptured aneurismal sac, of great size, displaying its concentric layers of coagulable lymph, hanging in irregular masses in the pleural cavity. Five of the vertebrae were deeply eroded. The left crus of the diaphragm was destroyed, and the muscle partly enveloped the tumor in the form of an arch. The heart was flabby, shrivelled, and of a livid hue. Near the bifurcation of the aorta was a well-defined oval perforation of the posterior surface, communicating with the sac.

We have now condensed the most important information contained in this long and interesting paper of Dr. Stokes, and beg to offer him our thanks for the benefit which we have received from its perusal.

A PRACTICAL TREATISE ON MEDICAL JURISPRUDENCE, &c. &c. By J. CHITTY, Esq. Barrister at Law. Part the First. Royal octavo, pp. 466. July, 1834. Price One Guinea, with Plates.

The Doctor is situated very differently from the Lawyer in a court of justice, and when a subject of medical jurispru-

dence is under investigation. The medical man is entirely passive—in fact, he is a witness brought forward to elucidate points of medicine (including all its branches of course) *alone* and without any reference to the law of the case. The lawyer, on the other hand, questions the witness on a subject with which he is not supposed to be conversant, and consequently the more he knows of medicine, the better qualified he is, not only to elicit truth, but to puzzle the doctor for the sake of his client. Thus, if a medical man was perfect in all branches of his science, and never read one word of law, he would give as good evidence as if he had all the legal knowledge of Blackstone, Coke, or Littleton. This shews how much more important it is for the counsellor to study physic, than for the physician to study law. Is the physician ever examined on the law of the case in any court? We never saw such an instance. To the medical reader Mr. Chitty's work may appear to have entered a great deal too far into medical matters, and, in fact, to form a *popular* digest of medical science, for which *they* have no occasion. But Mr. Chitty clearly saw that the medical part was wanted by non-professional and not medical people, as his title-page renders evident; for it states that the work is designed for "members of Parliament, lawyers, coroners, magistrates, officers in the army and navy, and private gentlemen." Not a word is said about medical practitioners among the anticipated readers; but he adds that the work *will* contain, "all the laws relating to medical practitioners." In his preface he distinctly informs us that the *fourth* part will contain the "laws relative to members of the medical profession in particular, viz. their qualifications, rights, privileges, duties, and liabilities, whether as physicians, surgeons, apothecaries, &c." Now as this fourth part will be included in the second volume, which will be published separately, it appears to us that he intends and expects that lawyers will be the chief purchasers of the first volume, (now under review,) and medical practitioners of the second. We would ad-

vise Mr. Chitty, therefore, to vary the amount of the editions according to this calculation. Mr. Chitty informs us that, in the *fifth* part of the work, that is, in the second volume, will be introduced the subject of *medical evidence*, and here he lets fall a sentiment which we have always advocated, namely, that the best way to study the law of *medical evidence*, is to study our own profession thoroughly. He does not agree with that amiable but enthusiastic writer, the late Dr. J. Gordon Smith, that "medical evidence" should be made a kind of distinct study, and that the individuals who are to give testimony in a court of justice, should agree previously, as to the tendency of their answers. "Lastly is given a view of *medical evidence*, and this rather to *limit* any direct professional education as regards the *manner* of giving evidence, and to suggest the higher importance of each individual, stating his *own genuine testimony*, rather than studying to agree with other practitioners."

Our author dwells with great reason and force of argument, on the necessity of a general knowledge of medical jurisprudence on the behalf of members of the Legislature, who are often called upon to enact laws relating to public health, nuisances, quarantine, &c. &c. He aptly asks, would members of the Legislature make the crime of procuring abortion depend on the period of quickening, if they knew any thing of the laws of foetal life? Or would they be so ready to put quarantine in force, if they were better acquainted with the laws of epidemic diseases? The late cholera-phobia, and the impotent attempts of legislators to arrest the current of epidemic constitutions of the atmosphere afford biting examples of the truth of Mr. Chitty's remarks.

That all persons acting in a judicial capacity, should have such a general knowledge of medicine, as to enable them to comprehend the import of the chief technical terms employed by medical men, is strongly insisted on by our author. He illustrates this in the following manner.

"Suppose a medical witness should swear that a blow or wound had been

given on the Clavicle (vulgarly called the Collar-bone,) or the Scapula (vulgo Shoulder-blade,) or in any other technically described part of the body, would it not be desirable that the Judge should instantly, without stopping to inquire, not only know the name of the part affected, but also be able to judge for himself what would be the probable consequences of the injury; for otherwise his mind would be occupied in seeking information merely on the import of terms, or in explanation of probable results, when he should be proceeding with more important considerations; and few minds are so powerful as to be able simultaneously efficiently to consider two different subjects."

Mr. Chitty quotes an observation from Professor Amos, which we hope will not be lost on judges and counselors. That gentleman remarks that "even some judges as well as counsel are not unfrequently *very shallow men in science*, and therefore too apt to attack medical witnesses for using technical terms unknown to them—a just reflection, at least, upon counsel, that it is to be hoped will, ere long, be shewn to be no longer well-founded." This state of things, however, we can hardly expect, in our days. It cannot be expected that lawyers who have so much to study on their own account, should be very conversant with medical technicalities, and therefore it is the duty of the professional witness to avoid such terms as much as possible. We have lately had a lamentable instance of want of tact, and even of common sense, exhibited in the committee on medical education in the House of Commons. A physician, of no small calibre, and who entertains no mean opinion of himself, on being asked if the limits between physic and surgery were so well defined as to require a distinctly different education for each kind of practitioner, replied, in about one hour's dissertation on the anatomy of the eye—on the nature of iritis—on the *modus operandi* of mercury, and other matters which were about as relevant to the question put to him, as a treatise on electricity is to the manufacture of soap. During this exhibition

the whole audience were laughing or grieving at the folly of the exhibitor, who construed the universal action of the risible muscles into rapturous plaudits for the immense knowledge which he was pouring forth to enlighten the world!! A more sickening specimen of anile imbecility was never seen upon earth; and it will form a blot on the records of the important investigation alluded to, which the FELLOWS of the College may very fairly throw in the teeth of the Licentiates, as a precious specimen of their order. It is impossible, indeed, to frequent our courts of justice, without daily witnessing the most lamentable examples of want of tact, and common judgment on the part of medical witnesses. This is remarked by the bar, the members of which speak in derision of the testimony of professional men. These hints will not, we hope, be lost on our brethren.

In respect to barristers, a general idea of medical matters is essential to their conducting many important causes at the Bar.

"With respect to *Barristers*, or at least all who practise at the Criminal Bar, or hold a brief in a life policy cause, or in an action against a surgeon for alleged misconduct, it is as much their professional duty as their interest to obtain a complete and perfect knowledge of every branch of these subjects so intimately interwoven with each other. How disastrous to his credit, and how painful to his feelings, would it be to hear it asserted, after the execution of a prisoner, that the conviction was attributable to his Counsel not having put, or having injudiciously put, a particular medical question, or generally proper questions connected with the subject; and yet such omission or blunder might have been probably attributable to mere ignorance of subjects which were not directly connected with the more ordinary and daily object of his *legal* study."*

* In Mary Wright's case, convicted at the Spring Norwich Assizes, A. D. 1833, of murdering her husband, the counsel, Mr. J. Sidney Taylor, so ably

In advocating the propriety—as well as the possibility of a lawyer becoming generally acquainted with the principal points of medicine, and that without neglect of their own proper studies, Mr. Chitty quotes some observations from Dr. Adam Smith, respecting apprenticeships, which we hope will, ere long, be acted on by our legislature, as far as the medical profession is concerned. “Dr. A. Smith observes, there is no necessity for an apprenticeship of *seven years*, exclusively devoted to watch-making, or any other department; nor is there any occasion for the waste of *seven years*—and still more of *ten years*, upon the sole study of the dead languages. Much of the time ought to be occupied in the examination of other branches of science and literature, and which would infinitely more interest and improve the minds of youth, and enlarge their intellectual powers and attainments.” These truths would be more useful than acceptable at Oxford, where so many of the best years of life are occupied with classical lore—or rather with acquiring the meaning of words, instead of cultivating those arts and sciences which prove useful through life. Cambridge, where mathematics are more favoured, does not fall so much under the scope of this censure as the Sister University. The following perhaps is modestly expressed.

“With respect to *Medical Practitioners*, although I cannot anticipate that my observations upon *Medical* subjects will be regarded as of any authority, yet as respects *Students* in Medicine or Surgery, I venture to hope that

the analytical summary and condensed view of most of the present doctrines may be found useful; at all events, as regards the former, it is of the utmost importance that they should be fully informed of the *laws* respecting all injuries by violence, poison, or otherwise, to the person, and many other branches of the law, and which have been greatly, and in many respects entirely altered since the publication of the previous treatises upon Medical Jurisprudence. It is therefore hoped that the work may be found useful to *them*, as affording a view of the *law*, to which their attention and testimony is to give due effect; and the pages respecting the peculiar *laws* affecting the *Medical Profession* and its branches, may be found important even to their pecuniary interests and welfare.”

“If this “analytical summary and condensed view” of the present doctrines have been drawn up by a lawyer, it is one of the cleverest compendiums we have ever seen. It is worth five dozen of the compendiums of Thomas, Reece, Graham, and other compilers of popular systems of medicine. We may here, also, take occasion to correct an error which has been promulgated by some of our contemporaries, namely, that this first part is only a fifth part of the whole. The other four parts are to be comprised in a volume equal in size to the present part, and thus the whole expense will be two guineas instead of five. We conclude, then, with a confident expression that this is the best compendium of medicine that has ever been drawn up for the benefit of non-medical readers.

drew the attention of the learned Judge to the absurdity of executing a woman with child, though *not quick*, that he contributed towards saving her life; and after a jury of matrons had, upon her plea of *pregnancy* in delay of execution, *erroneously* found her not to be quick with child, she was delivered of a mature child at a time which clearly denoted that she must have been quick at the time of the trial, and the woman was finally transported instead of executed.”

THE OTIC GANGLION.

In the Number of this Journal for April, we presented to our readers a short account of the difference of opinion existing amongst the anatomists of Germany, as to there being such a ganglion as that described by Arnold, under the name of the otic or auricular ganglion; and we concluded by observing that, in this country, Mr. Mayo

had recently acknowledged its existence. We were not then aware that, in doing so, we scarcely acted impartially, in omitting all mention of the share which Mr. Thurnam (at that time a pupil at the Westminster Hospital, and secretary to the Westminster Medical Society) had in its recognition. We are, therefore, inclined to lay before our readers a little sketch of the history of this ganglion.

The ganglion oticum, seu auriculare, called also ganglion Arnoldi by Professor Tiedemann, in honor of its discoverer, Dr. Frederick Arnold, of Heidelberg University, was described by that anatomist, in his work on "the Cephalic Portion of the Vegetative Nervous System in Man," which was published at Heidelberg and Leipsic in 1831. A translation from this work, of his description of its anatomical and physiological relations, by Mr. Tybe, of Devizes, will be found in the *Edinburgh Medical and Surgical Journal* for July, 1833. In the following August, Professor Mayo, in a paper entitled "Physiological Observations," published in the *London Medical Gazette* (vide No. 45.) stated that himself and Mr. Partridge had dissected for it in two subjects, and had been unable to discover it. He, therefore, concluded, that Arnold was mistaken as to the existence of any such ganglion, and stated his belief, that the nerves which he describes as peculiar to it, really belong to the third division of the fifth pair itself. Matters stood thus, when, as we find from the *Medical Gazette* for Dec. 21st, 1833, Mr. Thurnam commenced his dissections, and, having made out its existence in three instances, he announced this, as well as his mode of dissection, in the above *Journal*.

A month after this, Mr. Mayo, in the same *Journal*,* acknowledged its existence, and the correctness of Mr. Thurnam's method of dissection; and also announced the existence of filaments, not described by Arnold, which establish a connexion with the chorda tympani.

We have seen Mr. Thurnam's preparations of the ganglion, and have compared them with Arnold's figure, with which they appear accurately to correspond, except in the shape of the ganglion, which is not of so regularly ovoid a form as he has represented it, but more semilunar, as stated by Mr. Mayo.

The interesting nature of the anatomical relations of this ganglion to the organ of hearing, indicating a corresponding physiological relation, and such an one as the ophthalmic ganglion bears to the eye, as Arnold has so beautifully pointed out, induces us to consider it as an important discovery in the anatomy of the nervous system of "organic life."

AN ESSAY ON THE RELATION OF THE
THEORY OF MORALS TO INSANITY.
By T. MAYO, M.D. Octavo, pp.
49. 1834.

This subject borders a good deal on the metaphysical, and we apprehend that it will not excite much attention among the author's professional brethren.

Dr. Mayo appears to think that, speaking generally, there is placed within the mind of man a monitor, called CONSCIENCE—a sense of moral feeling—which tells him when he does wrong—but that there are some exceptions, where this same conscience either does not exist at all, or is overpowered by their vicious propensities, and kept in abeyance. But these rare exceptions he considers as only proving the general rule, and he triumphantly asks Dr. A. Smith (*without fear of an answer:*) "What is that in which all men sympathise, as obligatory on their moral conduct?" As Dr. A. Smith is not likely to hear the question, we will endeavour to answer for him. Our reply is—"NOTHING." There is *nothing* in which all men sympathise as obligatory on their moral conduct. If there was, the Chinese would not fling their offspring into the river without any qualm of conscience, while the Englishman acknowledges it a crime against God and

* January 18th, 1834.

man, and would swing for it at Newgate. If there was an innate, congenital, and universal monitor, or conscience, independent of education, the Hindoo would not hold it a crime to slaughter a cow on the banks of the Ganges, while the cockney looked upon it as no sin at all in Smithfield. Where is this innate monitor, when the Otaheitan slaughters and eats his enemy, at which the conscience of the Christian revolts? But why need we multiply examples. It is as clear as the sun at noon-day, that to the immortal soul is given an understanding, by which it learns good and evil according as it is taught. It has no innate power or conscience, by which it can discriminate good from evil, independent of education. If there was such a power, what need had we of revealed religion, to direct us to the one, and to guard us against the other? If there was an innate power or conscience, there could be no exceptions. Our author, however, thinks that there are such exceptions, and that the individuals thus excepted from the influence of conscience should be treated as insane. The following passage will illustrate Dr. Mayo's notions on this point.

"Mr. A. was born in a respectable station, and is in possession of a good fortune, of as much, at least, as he has allowed to remain out of a good fortune. He has a wife and children, and as many friends, or rather associates, as his convivial qualities retain for him, in spite of the hardness of his character. He has always been profusely extravagant; for his passions and appetites have compelled him to squander money, which he would probably have hoarded, if his selfishness had taken that turn. His temper is at once stern and violent; and all who know him expect that the dispositions of his will must prove him, to the last moment of his life, utterly unjust. If he had sufficient courage he would rob or murder; for his cupidity is under no moral check; but he is naturally very timid, and owes to this circumstance his freedom from such acts as the law construes into crimes. Such is Mr. A., and such also, or as nearly such, as the distinctive

points which separate all individuals will allow, is Mr. G. his neighbour. But there happens to exist a peculiarity in the latter, which materially alters the course of his life, and its results upon others. Mr. G. was observed to talk very much to himself. This excited attention; and, on further inquiry, it was discovered that he was habitually under the influence of false perceptions, and that he considered himself solicited by certain voices, audible only to himself, to perform those actions which indeed flowed naturally enough from his own evil dispositions. Mr. G. was accordingly recognized as a lunatic, and placed under restraint. Thus the family of Mr. G. is secured against the results of his moral character; and his fortune will descend according to the principles of law; thus dealing out a justice to others, and a protection to *him*, which would have been refused, but for this hallucination."

We certainly think it would be very desirable, if every man who is in the habit of injuring his family, or even himself, by his vices, his follies, or his extravagances could be checked; but then, to decide such knotty points of moral conduct, and to measure with exactness the length and breadth of a man's *conscience*, we must have a jury of moral philosophers and metaphysicians, with Dr. Mayo as the foreman—for we are quite sure that no common or special jury would be able to decide such questions.

Dr. M. proceeds to inquire into the analogy which this "moral insanity" bears to the commonly recognized, or "intellectual insanity." The following passage embodies this analogy, and also gives us a definition of insanity—a thing very much needed in the present state of our knowledge.

"Both perception and reflection in the insane intellect are governed by laws absolutely different from those which are recognized by the common perceptions of mankind. This, however, happens also to persons whom it would be absurd to call insane, or even eccentric. Thus a person under an excited state of mind, or in ill health, sees visions and hears voices equally

foreign to the common perceptions of mankind with those of the lunatic. The difference between the insane and all others who have similarly erroneous perceptions, is, that the latter are possessed of a power by which they can question the justness of their own perceptions, the insane have no such power; for when they begin to make use of such a power, they are so far convalescent. But as the erroneous notions which the insane intellect forms respecting the objects of sight cannot be referred by it by any test of their soundness, as possessed by it in common with the rest of mankind; so the conduct suggested by the inclinations and tendencies of the *vicious* in the sense in which we are now estimating vice, cannot receive any modification from a reference to a moral sense or common feeling of approbation. The analogy may be pursued further: for persons thus destitute of the moral sense may, from the very absence of a conflicting principle such as it would supply, move much more smoothly through their course of wickedness, than criminals of an opposite kind, namely, those who do wrong, 'having a law in themselves, their consciences bearing witness, and their thoughts accusing them;' and so also the progress through life of persons intellectually insane, is often very quiet and regular, far more so, at least than that of many persons justly considered sane, but exposed, from the very struggles of their reason with antagonist principles of the intellect, to constant uncertainties and doubts, which the insane are exempt from. Many a person, indeed,

'Cui sic assumpta voluptas
Et demtus per vim mentis gratissimus error,'

may envy the contented and self-satisfied lunatic.

Without supposing myself to have exhausted the points of analogy between these states of moral and intellectual deficiency, enough has, I think, been adduced to warrant our assuming, that the absence of the moral sense constitutes a form of unsoundness, analogous to that intellectual unsoundness, which is commonly understood when the term

insanity is used; and, accordingly, that we may talk of a moral and of an intellectual insanity as contradistinguished species."

Dr. Mayo asks, is it not probable that the same treatment may be applicable to the moral depravity as to the mental derangement? We think that, as far as *prevention* goes (which is said to be better than cure), a cell in a mad-house would very effectually prevent the commission of crimes—and especially the extravagance of spendthrifts; but if this kind of moral insanity were to come under the law, where, in God's name, would we find prisons? Well may Dr. Mayo say, "that the difficulty of finding that point, beyond which *vice* may be considered as the subject of coercion on the ground of unsoundness, will necessarily be great." A little farther on our author remarks—"the above considerations may appear to many persons absolutely erroneous: others may think them theoretically correct, but impracticable." We acknowledge that we are among the latter. For, even if the suggestion of Dr. Mayo, that common juries should be superseded by scientific, were put in practice, we are quite confident that twelve doctors would not be brought to agree upon any one case of moral delinquency, unless there were symptoms of common or intellectual insanity present. Dr. Mayo is an excellent physician, and, we have no doubt, a very clever and subtle metaphysician; but we suspect that, like an illustrious statesman and philosopher of this country, he is—

"Too fond of the right to pursue the expedient,"
and perhaps addicted, like the same personage, to—"cut blocks with a razor."

CLIMATE OF THE LANDS END.

From a very able and elaborate paper on the medical topography of the hundred of Penwith, district of the Lands-end, by Dr. Forbes, of Chichester, and published in the transactions of the Provincial Medical Association, we ex-

tract a passage or two respecting the climate of Cornwall.

The whole district, in question, possesses, as far as regards climate, all the advantages and disadvantages of a small island, moderately elevated above the level of the sea, and placed at a distance of forty or fifty miles to the westward

of the most southerly point of the mainland. In stating the various meteorological results, Dr. Forbes places, in most instances, the climate of London in opposition, that locality being best known, and affording a fair specimen of the mean climate of the southern part of England.

"1.—Annual Mean Temperature.

Landsend (Penzance).....	51.8°
London	50.3°

*2.—Mean Temperature of the Seasons.**

	Winter.	Spring.	Summer.	Autumn.
Landsend....	44°	49.6°	60.2°	53.3°
London.....	39.1°	48.7°	62.3°	51.3°

3.—Mean Temperature of the Months.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Landsend	42.5	43.5	46.4	48.5	54.0	58.5	61.2	60.9	57.6	53.7	48.8	46.1
London	37.3	40.4	42.6	48.0	55.6	60.0	63.4	63.5	58.8	51.7	43.4	39.5

4.—Difference of the Mean Temperature of Winter and Summer.

Landsend.....	16.2°
London	23.2

5.—Difference of the Mean Temperature of the warmest and coldest months.

Landsend.....	18.7
London.....	26.2

6.—Difference of the Mean Temperature of Successive Seasons.

	Of Winter & Spring.	Of Spr. & Sum.	Of Sum. & Aut.	Of Aut. & Winter.
Landsend.....	5.6°	10.6°	6.9°	9.3°
London.....	9.6°	13.5°	11.0°	12.2°

7.—Difference of the Mean Temperature of successive Months.

	Jan. & Feb.	Feb. & Mar.	Mar. & Apr.	Apr. & May.	May. & June.	June. & July.	July. & Aug.	Aug. & Sep.	Sep. & Oct.	Oct. & Nov.	Nov. & Dec.	Dec. & Jan.	Mean
Landsend...	1.0	2.9	2.1	5.5	4.5	2.7	0.3	3.3	3.9	4.9	2.7	3.6	3.1
London....	3.3	2.2	5.3	7.6	4.3	3.4	0.1	4.7	7.0	8.3	3.8	2.2	4.3

8.—Absolute Range of the Thermometer.

	Highest Extreme.	Lowest Extreme.	Greatest Range.
Landsend, (12 years,)....	84°	19°	65°
London, (30 years,).....	96°	5°	91°

9.—Mean Range of the Thermometer.

	Annual Range.	Monthly Range.	Daily Range.
Landsend.....	49°	24°	6.7°
London.....	64°	34°	11.8°

* The more common divisions of the seasons is here adopted, *winter* comprehending Dec. Jan. Feb. and so on.

10.—*Variation of Temperature of successive Days for the whole Year.*

	Mean Variation.	Extreme Variation.
Landsend.....	2.6°	10°
London.....	4°	18°

The preceding results place, in a striking point of view, the great peculiarity of the climate of this district, as to temperature: it possesses, as has been already remarked, all the habitudes of a small island remote from any large continent: it exhibits, in a great measure, the qualities of what may be called the *ocean climate*. This is characterised essentially by a remarkable degree of *equability* of temperature or small extent of range above or below the mean. In this respect the district of the Landsend is superior to any other part of England, and, indeed, to any place in Europe of which we possess meteorological accounts. Madeira is the only climate which Dr. Clark considers as superior in regard to equability of temperature.*

As necessary consequences of the greater equability, it will be seen by the preceding statements that, although there is a difference of only 14° between the mean annual temperature of this district and that of London, there is a remarkable discrepancy between the different seasons at the two places. Thus it is seen that while the summer temperature of the district is rather more than 2° *lower* than that of London, the winter temperature is very nearly 5° *higher*. The spring temperature of both places differs less than one degree, and

that of autumn is 2° in favour of the Landsend. It thus appears that while the winter is much *warmer* than that of London, the summer is considerably *cooler*; the autumn is as much warmer as the summer is cooler, while the spring is nearly equal at both places. The temperature of the whole spring at Penzance, as taken by the thermometer, is, indeed, rather higher than that of London; still it will be observed, on referring to the tables, that this superiority is derived almost entirely from the month of March, the temperature of April being very nearly the same in both places, while that of May is more than a degree and a half *lower* at the Landsend.

The singularly small range of the thermometer in this district, gives rise to a remarkable difference in the relation of the temperature of the day and night, here and in some inland places; in summer the nights being as much warmer as the days are cooler, and in the winter both the nights and days being warmer. This will appear in a striking manner by comparing together the mean of the extremes, i. e. of the highest and lowest degrees of temperature as shown by the register thermometer during the two seasons, at London and Penzance.

	Summer.		Winter.	
	Day.	Night.	Day.	Night.
London.....	81°	42°	52°	23°
Penzance.....	72°	49°	55°	31°
London higher...	9°	—	—	—
Penzance higher.	—	7°	3°	7°."

It appears that, for equability of temperature, there is no place in England equal to the Landsend, excepting, perhaps, the neighbouring isles of Scilly. But it must be remembered that temperature alone is not the grand point of medical topography. The moisture of the climate must be taken into consideration—and even the *gloominess*, as acting on the spirits and health. We

apprehend that Penzance, so much lauded a few years ago, will not continue a favourite residence for pulmonary invalids, on account of the fogs and rains, the dreary shores, and the treeless hills of Cornwall. The cheerfulness of Hastings or the Isle of Wight, is no trifling advantage, where the mind is borne down by the infirmities of the body.

* Influence of Climate, p. 63.

MR. SANDWITH ON THE NATURE AND
TREATMENT OF WHOOPING-COUGH.

In a late Number of Dr. Hunter Lane's Monthly Archives, there is a paper of much research and practical discrimination on the above subject, from the pen of Mr. Sandwith, of Bridlington, who witnessed an epidemic, in the year 1830, of whooping-cough. In the majority of cases that presented themselves to Mr. S. there were evidences of acute or subacute inflammation. In the latter cases, the disease was greatly moderated by leeches to the region of thyroid cartilage, as recommended by Dr. Dawson. When the head was affected, the leeches were best applied between the shoulder-blades, with calomel, pulv. Jacobi, and the usual adjuvants. "Several examples of the disease, however, in its more exquisite forms, demanded more energetic means to subdue the inflammation. In some of these cases, the child lay constantly struggling under the aggravated dyspnoea of acute bronchitis, that "permanent difficulty of breathing, which continues between the coughing fits," as described by Darwin. As might be expected, there was considerable mortality where professional aid had not been sought.

In these cases, it was necessary to combine local and general bleeding with emetics, the warm bath, calomel purgatives, and blisters. The strong tendency to cerebral congestion deterred from the use of opium, in the form of Dover's powder, to any extent. The following case affords a striking example of metastasis from the mucous membranes of the brain.

"Master S. aged 4, became affected by whooping-cough in May. The attack was severe, but without producing acute symptoms of bronchitis; emetics, purgatives, and the prussic acid made no decided impression on the complaint. After exposure to cold, in the latter end of June, his cough suddenly left him; and general lassitude, loss of appetite, and increased feverishness supervened. The fever, with symptoms of cerebral irritation, increased from the 24th to the 30th,

when actual phrenitis demanded more active treatment than the less violent anti-inflammatory remedies hitherto used. About a teacupful of blood was taken from the arm on that day, and seconded by leeches and free purgation. The general bleeding was repeated on the first of July, and leeches to the temples and the sides of the neck were afterwards several times freely employed. Sleeplessness, and that delirious anguish which mark cerebral inflammation in children, were prominent and distressing features during the severity of the attack; there was also, for a day or two, rigidity of the spinal muscles, and a peculiar drooping of the head to the left side, with a semi-rotatory motion. The symptoms of cerebral irritation, though moderated by active treatment, did not wholly decline before a fortnight had elapsed from the time of the first general bleeding. The emaciation was equal to what we observe in the most protracted cases of fever. The first clear proof of the entire removal of cerebral irritation was a return of the cough, with its distinctive whoop,* which continued in a mild form during the whole period of convalescence. Natural and refreshing sleep, at first excessively profound succeeded to the long-continued scenes of excitement. A change of air finally removed the cough, and asses' milk repaired the wastes of the system. The case just described illustrates the truth of Dr. Palmer's remark relative to the complications of whooping-cough, that they 'will demand, with great vigilance and energy, a variation of practice precisely corresponding with such change.'

THE MORBUS ORYZEUS.

Our readers are aware with what un-

* "An interesting case of whooping-cough alternating with measles, and re-appearing on the decline of the latter, is related by Dr. Ferriar.—*Vide Medical Histories and Reflections*, vol. iii. p. 217.

shaken constancy Dr. Tytler has cleaved to the doctrine, of the epidemic cholera arising from the use of damaged rice. Through good and through bad report, in spite of argument, and in defiance of fact, the Doctor has hugged his bags of rice; and, holding them up to the attention of the world and of the Medical Society, he has endeavoured to seal, with philanthropic fury, the lid of this new Pandora's box. These degenerate times can scarcely afford one other specimen of such single-minded, and, indeed, single-handed, advocacy of a cause, which is derided by the ignorant million.

Towards the latter end of this month of July, 1834, the profession became aware, and the newspapers informed the public, that some fatal cases of cholera had occurred, while others of extreme severity were daily occurring. Then was the good Doctor up and stirring, and, like that honest animal whom the Lake Poet has described as sagaciously "turning his left ear round on the pivot of his skull," our watchful hero listened for the approach of the dreaded rice. That he heard it coming we will not say—but that he saw it will speedily be shewn.

Great minds are always in advance of their century. They pursue untrodden tracks, and detect the most important and extraordinary truths amidst rubbish neglected by vulgar observation. It is a trite remark, that while Sir Isaac Newton discovered the laws of gravitation, from watching the fall of an apple on the ground, the majority of men would have picked it up and eat it. Dr. Tytler is one of those commanding intellects that disdain the processes of ordinary reason. When he found that the cholera was coming, or come, he did not pursue its cause in the air, or in the water—in the heat or in the cold—in the diet or in the clothing—in contagion, or in epidemic influence—he found it in the *London Price Current of June*. His well-trained nose scented out the commercial iniquity which had sacrificed, and, but for Dr. Tytler, would continue to sacrifice its victims. Full of this great discovery, he immediately communicated

it to the *Lancet*, in which it was greeted with a cordial grasp. That Journal observed, on the interesting occasion, that "the question is one of prodigious importance to the community, and that Dr. Tytler is indebted to its gratitude for the zeal and ability he has displayed in introducing the subject to general notice."

We must now let Dr. Tytler speak for himself, and lay before our readers the *London Price Current*, in its native and beastly wickedness.

"Should it unhappily prove eventually," says Dr. Tytler, "to be the fact that *Asiatic Cholera* or *Morbus Oryzeus*, has re-appeared in this City, or in any other part of Great Britain and Ireland, the following extract from the *London Price Current* of June 3d, 1834, will satisfactorily explain the cause of this unfortunate circumstance, and abundantly prove that until vigorous measures be adopted to expel *poisonous rice* from the markets of England, the health of the community cannot be considered as secure from this terrible scourge and destroyer of the human race.

'RICE.—Large parcels of rice continue to be offered at public sale, which enables the buyers to purchase BY PRIVATE CONTRACT AT VERY LOW PRICES; Patna kind has been sold 12s. 6d. to 13s.; ordinary white Bengal at 10s. 6d. By public sale this day, 2970 Bags Rice; a part sold rather higher; the usual buyers are now attracted to Rice, on account of the reported short Corn Crops.'—From the *London New Price Current* of Tuesday, June 3d, 1834."

We cannot contemplate this cold-blooded traffic in pestilence without a shudder. What punishment can be too great for the miscreants who can deliberately barter in "Patna kind," and can coolly sell "ordinary white Bengal at 10s. 6d." We appeal to the Legislature, to deal with this new and monstrous guilt as it deserves; and should the people's representatives be callous to our prayer, we adjure the people to take vengeance on the criminals, and hurl the rice-contractors and their rice-bags into the Atlantic. For Dr. Tytler, money were an inadequate reward. He will live in the gratitude

of his Country, and the Poet Laureate may be invited to immortalize him in a mighty Orvzean Hymn, commencing, perhaps, with—

Risum teneatis amici.

PERFORATION OF STRICTURES.

Mr. Stafford has offered some desultory observations and published twenty-one circumstantial cases, to prove the necessity, the propriety, and the success of perforating strictures of the urethra.

When we take into account the numerous circumstances which impair the judgment, even when they do not affect the honour of those whose practice is novel or peculiar, we must cease to entertain surprise at the scepticism extended to the facts which such reasoners adduce. The amount of that scepticism may possibly be unjust, yet they who are most familiar with the history and indeed with the practice of medicine, are usually found to entertain it most freely. The rise and fall of doctrines and of methods are too rapidly displayed to allow it to subside.

The preceding observations are, perhaps, inapplicable to the instance of Mr. Stafford. His honour cannot be questioned, his judgment may not be impugned. Yet some objections to his cases and his practice present themselves, and his obvious inclination to pursue and to elicit truth, will probably induce him to regard them with attention, if not with favour. Mr. Stafford's activity and zeal have been proved by his several contributions to literature and science. He has printed and published a copious pamphlet, on the application of wax to ulcers; and although the former has been little read, and the latter has scarcely been found to succeed, the labour of the composition and the ingenuity of the proposal continue undiminished. He has also published a lengthened work on Diseases of the Spine, the merit of which has been thought by some to be overbalanced by its bulk. But Mr. Stafford's perforation of strictures has attracted and received the attention of the

public, to an extent much greater than his other attempts to improve the science and details of surgery.

We have stated that Mr. Stafford has published the particulars of twenty-one cases in which he divided urethral strictures by means of the lancetted stilette. The experienced surgeon involuntarily starts, and inquires how Mr. Stafford could have seen so many instances, in which it was impossible to introduce a bougie or catheter, and to carry it through the strictured part. The cases, in public and in private practice, in which this impossibility is experienced by those possessed of moderate dexterity, and acquainted with the best modes of treating stricture, are so few, so very few, that surprise at the good or evil fortune of Mr. Stafford is necessarily great. We lately heard Mr. Brodie declare, that for many years he has been foiled but once in getting an instrument of some description through the stricture. Perhaps other surgeons have not been so fortunate, yet we feel convinced that all will be astonished at the numerous array of impassible strictures displayed by Mr. Stafford. In our own experience, we have generally found that the number of unsuccessful cases afforded a tolerably just criterion of what was *not* the adroitness of the surgeon. On many occasions, patients present themselves to the house surgeon or the surgeon of a hospital, declaring that they labour under strictures, for which no instrument could be passed by the various medical men who have attended them. Yet in the vast majority of such cases, instruments are introduced at the institutions to which the individuals apply. Did the record of these cases attest or confirm the superior efficacy of a particular method, it would probably be easy to adduce as long and as imposing a list on the side of dilatation as Mr. Stafford has advanced in favour of division.

It may be stated as a general maxim in surgery, that of two kinds of practice equally efficient, the mildest, that is, the least painful and least dangerous, should always be preferred. Mr. Stafford asserts that he has never known

mischief arise from the operation of division, and that "the pain has been but trifling, not more, nor even in some cases so much as the puncture made in bleeding." This is an encouraging picture it is true, but the surgeon who has witnessed the pain occasionally caused by the gentlest use of the bougie, must hesitate to place implicit faith in the declaration, that the employment of a cutting instrument is attended with so small an amount of suffering.* Some allowance must, perhaps, be made for the natural fondness for our offspring, exhibited in the scientific world, as well as in the animal, a fondness which might have influenced, and may reasonably excuse the apparent partialities of Mr. Stafford. Those partialities are great and generous. He affirms, for example, that "no false passages have been made" by division. It might be difficult, on physical principles, to demonstrate, that an instrument like a lancetted stilette, which cannot from its constitution be guided with even so much precision as a bougie, and which must necessarily penetrate through all opposed to it; it might be difficult, we say, to demonstrate that such an instrument would not be likely to occasion a false passage. Yet this instance exhibits the superiority of experience to the efforts of reasoning. Whatever might have been anticipated, Mr. Stafford assures us that no false passage has been made; and that declaration must quiet the captious or presumptuous disputant. The happy picture displays no contrast of light and shade—it is sunny and clear as an Italian sky. Mr. Stafford thus closes his paper in our contemporary; the passage being perhaps more decisive of his good fortune, than characteristic of his attention to grammatical construction.

"Nor indeed has there *been* in any instance a single unfavorable symptom occur.† The treatment has been always

attended with success, and the patients, from having been in the most deplorable and painful state of disease, being emaciated and worn out by their long and continued sufferings, have in a short period been so relieved that they have gained flesh, and have become healthy and strong."

This flattering picture might almost appear to silence objection, yet we candidly confess that it would not induce us to resort to division, until we had practically satisfied *ourselves* of the impossibility of passing a catgut or a wax bougie, or catheter. We cannot avoid entertaining the suspicion that in some of the cases detailed by Mr. Stafford, such a proceeding, if conducted with caution and adroitness, would, perhaps, have been attended with success. The unnecessary employment of violence or of the knife is always to be deprecated, because it creates, or, at all events, increases the natural prejudice against surgical operations, and may tend to prevent some persons from submitting to them, whose cases require and whose lives might be preserved by them. We are disposed to believe that the division of strictures is too much praised and too much practised by Mr. Stafford.

Yet that gentleman, not content with his triumph over the urethra, has carried his views of conquest to the rectum. In the number of the Medical Gazette for July 26, of the present year, Mr. Stafford inserts a description and a drawing of some instruments invented or employed for the purpose of dividing what he terms an *elastic stricture*. This is a stricture of the permanent kind, which will admit through it a bougie, but which immediately on its withdrawal, will retract to its former calibre.

"These instruments resemble in their structure the lancetted stilettes, excepting that, instead of a lancet being thrust out at the point, a semilunar blade comes out at the extremity on the side, above, below, or laterally, as may be

* We lately witnessed an attempt to divide a stricture with a lancetted stilette. The patient writhed and shouted with the pain.

† It would not be easy to decide in

what classic work or in what society this species of construction may be met with.—*Rev.*

required, and as represented in the engraving. The mode of using them is to pass them through the stricture, and then throw out the blade, and draw the instrument back again through the contracted part until it is divided, when the blade is allowed to retire into its sheath."

An instrument of this description is applicable, according to the account of Mr. Stafford, to division or slitting of an enlarged middle lobe of the prostate gland—to the division of stricture of the œsophagus—and to that of stricture of the rectum.

Mr. Stafford relates at some length, a case of stricture of the rectum in which he performed division of the stricture. The stricture is said to have been situated at the distance of two inches and a half from the anus; it appeared to be indurated, and would allow a No. 12 urethra bougie to pass through it. On the 25th of February Mr. Stafford divided the stricture opposite the sacrum with an instrument such as has been mentioned. Tenderness of the abdomen appeared next day, and continued at intervals till the 8th of March. From that time till the 20th she did pretty well, but on the latter day she was attacked with erysipelas of the head and face, of which she died upon the 25th. We should state that, previous to her death, "a large bougie" could be passed with ease and with little pain.

Mr. Stafford's account of the dissection is imperfect. He describes the condition of the brain and of its membranes—a tuberculated liver—traces of peritonitis—cicatrizated ulcers of the mucous membrane of the small and of the large intestines—ulcerations, not cicatrized, in the sigmoid flexure of the latter. But where some prolixity might be excused—in the details of the nature of the stricture—curiosity is baffled by a meagre memorandum. "The gut at the strictured part," says Mr. Stafford, "would admit through it a bougie as large as the thumb. The cicatrix of the wound was very perceptible, and it was covered by a membrane analogous to that lining the intestine."

We may be wrong, and Mr. Stafford

may be right, but we do conceive that cases so related are of little essential benefit to science, whatever they may be calculated to confer on the narrator. Mr. Stafford may suppose that had the patient not died accidentally of erysipelas, she would probably have recovered, but we do not perceive as he appears to do, that the dissection absolutely proves this probability. To enable the reader to form an opinion, he should be made acquainted with the nature of the stricture. The pathologist perhaps will be tempted to smile at the sanguine therapeutics of our author. He (the author) attributes the cicatrization of the ulcers of the mucous membrane of the colon to his operation on the rectum, and concludes that all would have healed from the same influence. The reader of the case will perceive that symptoms of abdominal inflammation immediately followed the division of the stricture, and continued for ten or twelve days after its performance. Their cessation is converted, by the sanguine pathology of Mr. Stafford, into a proof that the ulceration of the bowels would have healed. "That such an inference (the ultimate healing of all the ulcerations) may be drawn is further proved by the pain and tenderness in the abdomen having ceased; shewing that the inflammation had diminished, and all the other symptoms abated." Most candid reasoners would probably attribute those inflammatory symptoms to the performance of the operation.

We would not be deemed hypercritical, nor would we be willingly accused, with justice, of endeavouring to pull down the merit of any man. But we really think that Mr. Stafford is inclined to carry his love and his advocacy of division of strictures too far, and admitting, as we do, the occasional utility and even the necessity of such an operation, we feel disposed to warn the inexperienced part of the profession against its too general and indiscriminate employment.

DR. A. T. THOMSON ON IODURET AND
HYDRIODATE OF IRON.

To theorize and speculate is a characteristic of talent and genius. Dr. Thomson has long distinguished himself by his practical observations in general, but especially by his labours in chemistry and pharmacy. The following extract will, we think, illustrate the remark with which we commenced this short article.

"In reflecting upon the solubility of the Ioduret of Iron; and the striking difference, in this respect, between that compound and its components;* and, knowing the value of these separately, as medicinal agents, I inferred that the curative influence of both might be greatly enhanced by the facility which the compound affords of introducing them into the system, in the state of combination. Another consideration which led me to suspect that this combination of Iron and Iodine would prove a useful medicinal agent, was my knowledge of the powerful influence of Iron as a tonic, when administered in the state of a Protoxide; and I was aware that it exists in this state in the Hydriodate, into which the Ioduret changes when it is dissolved in water. I supposed that, if this active oxide thus combined with Hydriodic acid were taken into the circulation, a circumstance extremely probable, the Hydriodate, meeting with an alkali, would suffer decomposition, and thus the two compounds would be enabled to exert their separate influence on the system, in a form and under circumstances the best fitted to render them efficient.

Now, there is much reason for supposing that the Hydriodate is decomposed in the system, and that the Protoxide of Iron, and the Alkaline Hydriodate which result, exert their separate influence on the nervous and the vascular organs; the former operating as a tonic on the vital solid, and the latter

as a powerful stimulant to the capillary system. Or, if we take another view of the subject, keeping in recollection the striking influence of Chlorine on the solution of the Hydriodate out of the body, and knowing, also, that this agent is evolved in the course of the circulation, it is possible that the Protoxide of Iron, which is set free by the decomposition of the Hydriodate in the system, may be converted into the Proto-muriate of Iron, whilst the Iodine is evolved in a free state; and thus the same tonic and stimulant influence would be as powerfully exerted as in the former case. If either of these theories of the manner in which the Hydriodate operates be admitted as correct, the class of diseases in which it is likely to prove useful at once present themselves; namely, those in which the capillary system requires to be stimulated and the tone of the habit to be maintained, or to be brought up to the healthy standard:—Scrophulous affections, Tabes Mesenterica, Chlorosis, incipient Scirrhus, Rickets, Amenorrhœa, Bronchocele, Atonic Dyspepsia, and all conditions of direct debility."

We have a very humble opinion of the amount of our knowledge as to the *modus agendi* of medicines in the interior of the body. The chemistry of the living alembic is to us a *terra incognita*; and therefore the ingenious theory of our author is as good as any other. It is of more importance to know that Dr. Thomson has successfully employed this combination of iron and iodine in the various forms of scrofula, of which forms he has adduced cases in illustration.

"As the Hydriodate of Iron possesses both the stimulant properties of the Iodine, and the tonic powers of the Protoxide of Iron, the probability that it might produce all the beneficial, without the deleterious, effects of iodine, was presumed; and I was, therefore, induced to order it in *scrophulous* affections. The results that have followed its administration have been such, that I have no hesitation in regarding it a most valuable addition to the means which we already possess of treating the *chronic* forms of these diseases."

* It is scarcely necessary to remark that metallic Iron is insoluble, and that Iodine requires seven thousand parts of water for its solution.

It is to be borne in mind, that the medicine in question is a stimulant; and that, when marks of irritation in the primæ viæ exist, care should be taken to clear the bowels, and remove, if possible, the causes of irritation, before exhibiting the remedy. The following form, we perceive, is that which our author generally employs:

R. Ferri iodureti, gr. ij. ad gr. iv.
Aque distillat. xj.
Tinct. aurantii, j.
Ft. haustus ter die sumendus.

Cases are adduced by our author, and by respectable correspondents, where the remedy was found useful in chlorosis, in carcinomatous diseases, in syphilitic cachexiæ, &c. for which we must refer to the pamphlet itself. As each of the ingredients, singly, is of known efficacy in many diseases, we consider it very probable that the combination will be found a valuable formula.

A DICTIONARY OF TERMS EMPLOYED
BY THE FRENCH IN ANATOMY; PHY-
SIOLOGY, &c. &c. By SHIRLEY
PALMER, M.D. Part I. July, 1834.

This is an extraordinary work, and, if completed, will be a very valuable one. We learn from the advertisement, that—

“The present work has been undertaken with a view of facilitating the perusal of French and German literature to the Medical Student or Practitioner who appreciates, as they deserve, the literary productions continually emanating from the press, in France and Germany; and who feels honourably solicitous to appropriate to himself, from their original source, the valuable facts, and the novel and often important views and opinions with which these productions teem. It may also serve to refresh his recollection, ever fleeting and evanescent without practice, of the elements of the Greek and Latin languages.

“How far the work, now offered, is calculated to achieve such objects, experience can alone determine. It was

not undertaken in a rash and unreflecting spirit: it has not been, thus far, executed without great labour and research. Had a longer period for its completion been allowed him, or had the Author been able, during such period, to concentrate his attention more exclusively upon the performance, the numerous errors and deficiencies, which the enlightened and experienced eye will readily detect, would not have been suffered to escape correction.

The *Second Part* will appear about December next,—the *Third* and last, with Title-page Preface, and an Index of the German terms, in the Spring of next year.”

It is, as we said, an extraordinary work, full of erudition and pregnant with research. We cannot, of course, give an analysis of a dictionary; but, by exhibiting one or two specimens, the reader will be enabled to judge of the work.

“ANÉVRYSMÉ, ANEURYSME, s. m.—ἀνεύρυσμα (ἀνευρύνα, I dilate)—aneurisma, aneurysma, n. L.—aneurisma, anevryisma, n., pulsadergeschwulst, f., die erweiterung einer arterie, G.—aneurism, swelling, dilatation of an artery. Aneurism may be defined, a tumor, formed by arterial blood from dilatation, rupture, or division, of the coats of an artery. The term has been also applied, by some writers, to dilatation of the cavities of the heart, and even to enlargement of the organ from thickening of its parieties.

Aneurism shews itself under three different forms: 1. that of *true* aneurism—*vrai*, F.—aneurysma *verum*, L.—das *wahre* anevryisma, G.—formed by dilatation, circumscribed or diffused, without breach, of all the coats of an artery. In the *former* case, it constitutes the variety called *circumscribed*—*circonscrit*—*circumscriptum*, umschreibene;—in the *latter*, the *diffused*—*diffus*—*diffusum*—ausgebreitete—of *true* aneurism: 2. *false* or *spurious*—*faux*—*spurium*—das *falsche* anevryisma—formed by a breach of two or all of the arterial tunics, and presenting two varieties;—the *circumscribed*, in which the blood, escaping through a rupture of the internal and middle coats, con-

verts the external coat of the vessel into an aneurismal sac;—and the *diffused*—where the external coat, also, has subsequently given way, and the blood been poured out into the surrounding cellular structure: 3. *mixed aneurism—mixte—mistum—das gemischte*—which likewise comprehends two varieties; one, the *internal*, consisting of an hernia-like protrusion of the internal, through a wound or rupture of the middle and external coats of an artery;—and the other, *external*, produced by rupture of the dilated coats of true aneurism, and consequent diffusion of its contents through the circumjacent membrane.

Besides these principal forms, there is *Aneurism by Anastomosis*—*anévrysme par anastomose*, F.—*das anastomotische aneurysma*, G.—apparently caused by aneurismal dilatation of the extreme vessels of a part, and extravasation of blood into the distended cells of the cellular structure.

Aneurismal Varix—*Varice anevrysmale*, F.—*das anevrysmatische Venengeschwulst*, G.—is said to exist, when, from the transfixion of a vein, and penetration of the subjacent artery, by a lancet, or other sharp instrument, and consequent adhesion of the two vessels, a direct communication has been established between them; and the blood, flowing from the artery into the vein, dilates the coats of the latter into a sac. If, however, from the obliquity of the wound or other circumstance, such communication be not direct, but take place through the medium of an aneurismal sac formed by dilatation of the wounded artery, and interposed between the vessels, the disease is termed *Varicose Aneurism*—*variqueux*, F.—*aneurysma varicosum*, L.—*das varikose aneurysma*, G.

Aneurisms, from their situation, are, lastly, distinguished into *internal* and *external*. To the *former*, belong aneurisms of the cerebral, and especially of the basilar, arteries—probably a frequent source of fatal apoplexy—and of the thoracic and abdominal aorta: to the *latter*, aneurisms of the temporal and carotid arteries, and of the larger arterial trunks of the extremities. For

a minute description of the varieties, formation, and distinguishing characters, of the disease, consult Hodgson's *Treatise*; and Art. *Aneurism*, in Cooper's *Surgical Dictionary*."

"CLIMACTÉRIQUE, adj.—climactericus (*κλιμακτήρ*, every seventh year of human life), L.—*klimacterisch*, G. The ancients believed that human diseases were developed with greater frequency and fatality in certain years than others: and, hence, every seventh year was called by them, the *climacteric year*—*année climactérique*, F.—*κλιμακτηρικὸς ἐνιαυτὸς*—*annus climactericus*, L.—*stufenjahr*, n. G; while the sixty-third, as a multiple of 7 by 9, and therefore peculiarly pregnant with mortal ailments, was distinguished by the title of the *grand Climacteric*. Some physicians have also termed *climacteric*—*époques climactériques*, F.—certain periods of life, as characterized by revolutions in the human economy not dependent on the numerical progression of years. Such are the period of puberty in both sexes; and that of the cessation of the menstrual flux in the female."

We sincerely hope Dr. Palmer will complete the work, which will form a monument to his industry—an extremely useful Dictionary for all who consult the works of our Continental writers.

MR. GUTHRIE'S OPERATION OF TYING THE COMMON ILIAC ARTERY.

In the 39th number of this Journal, we mentioned that Mr. Guthrie had tied the right common iliac artery for what appeared and was deemed an aneurysm. The operation was thought to be successful, but the patient has since died, and the truth of the Hippocratic axiom—*observatio difficilis, experientia fallax*—has been illustrated by the event.

The Medical Gazette contains a long and an interesting lecture delivered by Mr. Guthrie on the subject. Much is needlessly apologetic, for Mr. Guthrie can afford to be mistaken. When we subject the lecture to a gentle pressure, its solid residuum is this.

The patient, a lady, was not young, yet amidst the abundance of statements and of information, we find no mention of her age. She had laboured for some time under pain in the hip, when she accidentally struck it. Soon after this a tumor appeared, and when it had attained the size of her fist, it began to beat "like her heart." It continued to increase, and after the lapse of a year she came to town. At this time, the tumor was as large as an adult head, situated on the right buttock, and so inconvenient as to prevent her from lying on that side, or even on her back. Separate examinations were made by Mr. Guthrie, Sir A. Cooper, Mr. Thomas, and Mr. Keate. On the whole, they concluded that the tumor was aneurism, and the common iliac was tied by Mr. Guthrie.

We believe we must be indulged with Mr. Guthrie's own account of the operation.

"I began the operation by placing her on a table, as much on her back as the tumour would allow, and by making an incision upon the fore part of the belly extending, beginning below the inside of the interior spine of the ilium, about an inch, carrying it upwards and diagonally inwards towards the edge of the rectus muscle above the umbilicus, so that the incision was between six and seven inches long. I may state, that if the incision is made in the side, from the ribs to the ilium, in a straight line, the greatest possible difficulty is experienced in turning over the peritoneum so as to place your finger upon the last vertebra; but if a diagonal inclination be given towards the rectus muscle, not opening its sheath so as to expose it, but carrying the incision fully up to that part, then there is room to turn over the peritoneum with its contents, so as to get at the artery.

After dividing, then, the skin and the common integuments, the three muscles were of course also divided in layers; the division of the latter, the transversalis, was attended with very considerable difficulty, inasmuch as there was little fascia transversalis, and the peritoneum was remarkably thin—as thin as the common white silver pa-

per, or nearly so, that is used for ordinary purposes. On attempting to reach the under part, on the inside of the ilium, so as to push the peritoneum over, I found this could not be done; that the tumour had extended inwards; and some bleeding took place from the large veins which surrounded it, giving rise to the caution not to proceed farther in that direction. At this moment, in spite of the greatest possible care that could be taken by Mr. Keate, who protected the peritoneum, a little nick took place in it, and the small intestine made its appearance below. I then tried to gain a greater extent of room upwards; but where the tendon of the transversalis passes directly across to form the sheath from the lower ribs, the peritoneum is usually so exceedingly thin, and so closely attached to it, that it can scarcely be separated but with the greatest difficulty. I knew this from an operation of a similar kind which I performed at the Westminster Hospital the year before, and in spite of all the precaution that I could then take, the peritoneum was on that occasion injured. I was so well aware of the great probability of its being wounded at this part, that I took double precaution; but in spite of all the care that could be taken, this part of the peritoneum was opened, and the right lobe of the liver made its appearance through it. The opening on the fore part of the belly was not large enough to admit the two hands, and there were two openings in the peritoneum, one above, and the other below, each of them much disposed to increase in size by the moving of the patient; and the operation did not seem to be the most agreeable one that could be performed. The peritoneum, however, being separated a little from the posterior wall of the abdomen from the outside, four fingers of one hand could now be introduced under it, and turned a little over towards the opposite side.

There is a point here of great importance to recollect, and it is, that the peritoneum must be raised over without the hand being pushed back towards the posterior wall of the abdomen but as little as can be avoided; for there is

some fat usually at that part, if there be any to be found in the body, and behind which you are very apt to get in performing the operation, instead of going in the front; and if you do, it leads to the under edge of the psoas muscle instead of the upper, and renders the operation much more difficult.

The peritoneum being now separated from behind and carefully turned over, I found I could only get one hand, or a little more, underneath in search of the artery, and that no more room could be obtained by increasing the incision upon the fore part of the belly. Under these circumstances it became obvious that, to seek in the dark, without being able to have the advantage of sight, for the internal iliac artery, which can hardly be found at any rate but with difficulty, was not likely to be attended with success, and I therefore determined upon placing the ligature on the common trunk of the artery. In order to effect this, I separated the peritoneum, passed my finger across the psoas muscle until it rested upon the fifth lumbar vertebra; and I now thought, of course, that I must feel the common iliac artery; it was not, however, to be felt. I passed my finger up as high as the fourth lumbar vertebra, trusting that I should feel the end of the aorta; but even that could not be felt, from a circumstance that I was satisfied had occurred in the previous operation, which is not known in surgery, but which I will now state: it is, that the common iliac artery rises with the peritoneum, which I believe the vein does not. My finger then, resting upon the spine, was beneath the vessel I was searching for. Mr. Keate endeavored, to raise the peritoneum, to give me an opportunity, if possible, of seeing the vessel; but that was quite out of the question; the incision, however long, was not sufficient to allow this to be done. However, on raising the peritoneum a little, he felt the pulsation of the external iliac artery; and I now then, passing my finger upwards, found the common iliac adhering to the peritoneum. I separated it carefully with the point of the fore-finger of the right hand, with the finger and thumb of the

left—for no more room could be given—I passed the aneurismal needle, and placed a common thread ligature (now on the table) round the artery, which was done without seeing it. In an operation like this, you must have your eyes at the extremities of the fingers, and your head in your hand. I could bring the artery a little forward, by means of the aneurismal needle which was underneath it; and in this manner it was brought into view. It appeared to be perfectly clear; and I calculated, from feeling the division of the aorta above, that the artery was tied exactly in the middle.”

We need not pursue closely the subsequent details. On the following day the patient required bleeding, and was bled. The temperature of the limb was preserved by constant frictions, with the application of hot bottles to the feet.* The operation was performed on the 24th of August, and on the 19th of September, the ligature came away. The tumour rapidly diminished in size, and, in a month, it lessened by one-half. In the course of two months the wound had healed, with the trifling exception of one small point. In December or January the patient went to Scotland. The tumor again augmented in size, and on the 30th of April the patient died, exhausted by disease.

Perhaps it is not necessary to state more than that the tumor was not an aneurism, but a malignant growth, of the nature of medullary sarcoma. The common iliac had been tied about its middle, where its cavity was found, on dissection, to be obliterated. It was pervious above and below, to an eighth of an inch from the actual site of the ligature. No coagulum had consequently formed between the latter and the nearest branch arising from the ves-

* De Graefe, who saw the patient, recommended the application of cold water to the limb, to maintain vital heat! How strange that the ablest foreigner has always an absurdity to set off against his merits. His organ of common sense is seldom free from a flaw.

sel, or from the trunk of which it was a continuation. The internal iliac on this side was enlarged—the external iliac was unaltered—the principal channels of the collateral circulation were the epigastric and the circumflexa ilii.

The case is one of great interest, of some importance. It does honour to Mr. Guthrie as an operative surgeon, and no discredit as a practical man. We may venture a few remarks on the details.

It is evident that a mistake was committed in the diagnosis. Yet the character and the experience of the Gentlemen who made it affords a guarantee to all who are possessed of candor and judgment, that the error was more owing to the imperfection of science, than the fault of the individuals. It is a fact of which many members of the profession are, perhaps, not sufficiently aware, that very great difficulty frequently exists in distinguishing pulsating medullary tumors from aneurismal sacs. The ordinary means of diagnosis applied to tumors receiving a pulsation from arteries above, beside, or beneath them, are inapplicable to pulsating fungoid tumors, for the obvious reason, that their pulsation is occasioned by their own blood-vessels. It might seem that the capability of emptying a sac by pressure would enable the surgeon to distinguish it from a tumor not containing fluid, and therefore not admitting of diminution by evacuation of its contents. But in some cases of aneurism, the deposition of lamellated coagulum is such that pressure effects little alteration of their size: and pulsating malignant tumors contain so numerous or capacious blood-vessels, that pressure may exert a considerable influence. We need not pursue these considerations farther. It is certain that the diagnosis between the two diseases is occasionally so obscure, that the most experienced and judicious surgeons are liable to error, and have committed a mistake. We may allude to an instance which we witnessed a few years ago.

The patient was a lady, from forty to fifty years of age. The tumor was situated beneath the crest of the right ilium. It extended somewhat upwards

into the abdomen, outwards over the natis downwards on the thigh, and inwards to about the centre of Poupart's ligament. Some large veins meandered on its surface. It pulsated synchronously with the heart. A large artery was felt entering it anteriorly, and another was distinguished behind, in the situation of the sciatic branches. Pressure on the common femoral artery was said to arrest the pulsation in the tumor. The tumor, when first seen by the surgeon, (an experienced and a good one,) whose patient the lady was, had little or no appreciable pulsation. The surgeon considered it an abscess. The tumor began to pulsate, and the surgeon then thought it fungus hæmatodes. In order to decide the matter, he punctured the tumor in two places with a grooved needle, when there issued from each puncture a *pulsating* jet of arterial blood. This circumstance appeared so decisive of aneurism, both to him and to other surgeons who saw the case in consultation, that the common femoral artery was tied. The ligature on this vessel had not the effect of commanding the pulsation in the tumor. In six days after the performance of the operation the patient died. The pulsation in the tumor had never ceased. The tumor, on dissection, was highly vascular, and of medullary consistence. The external circumflex artery passed into it.

We have heard of another case, in which a mistake of this description was committed. The publication of Mr. Guthrie's case will have the good effect of directing attention to the subject, and though it must be owned that it does not enable us to fix on any symptom as peculiarly characteristic of either disease, it is calculated to teach the surgeon to pause, and to hesitate more than he has previously done in performing a serious operation for the cure of a pulsating tumor. Caution in such cases is now more indispensable than ever, and perhaps this alone may prevent the frequent occurrence of mistakes. In the present state of science, it is probable that such occurrences are more likely to be avoided by attention to the history of the complaint, to its seat, its

general features, than by resting on any particular character. The "purring thrill," for instance, or the "whizzing" said to be diagnostic of aneurism, are now well known to be produced by pressure on any artery of large dimensions.

A word or two may be permitted on the operation itself. To say that it re-ounds to the surgical reputation of Mr. Guthrie, would be merely to express, in imperfect language, the feeling which all must entertain. We may add two remarks of that gentleman upon the subject.

"It was not formidable from the bleeding, but from the circumstance, that room could not be got for the introduction of the two hands; and, strange as it may appear, the whole safety and ease in doing the operation consist in the incision being so large at the fore part of the belly, that the bowels and the peritoneum may be freely turned over by the two expanded hands, so that you can see what is going on underneath. In the former case, the whole parts could be seen in the peritoneum distinctly, and several gentlemen not in the profession saw the iliac artery in its natural situation. I have no hesitation in saying, that, in the manner I have described, the operation of applying a ligature on the aorta might be accomplished without the least difficulty. I could as easily have tied the aorta as the common iliac artery; it was only necessary to have gone an inch higher. If at any future period it is necessary to pass a ligature round the aorta, it is in this way the operation should be performed."

But this operation will lead to another important result; I believe it will prove that it will never be necessary again to put a ligature upon the aorta. It has been twice attempted, and in both cases the patients lost their lives, just as they would have done if the operation had not been performed. If you examine the parts in the dead body, you will find that, if you can only apply a ligature three-quarters of an inch from the termination of the iliac on one side, that it re-

quires little knowledge to pass one over the iliac artery of the opposite side; so that, when an aneurism has been formed, and you cannot tie the iliac artery of the side in which the disease is situated, you may be enabled to do it in the way I did this operation—from the opposite side, and it is not rendered necessary to tie the great trunk of the aorta at all. That is one of the most important results which I think may be deduced from the operation I have described."

Mr. Guthrie indulges in an observation on the consequences of the application of the ligature to the artery, to which we shall venture to allude.

"A little opening was made in the artery above and below where the ligature was tied, in order to observe the state of the vessel; and it appeared that it was pervious to within the eighth of an inch on each side of it; so that the ligature just cut the artery through, and the two cut edges united by adhesive inflammation above and below, without forming a coagulum, and without diminishing up to the next collateral branch—a fact which I have said always existed—but which is quite contrary to the received opinions of the present day."

If Mr. Guthrie intends to affirm that coagulum is never deposited in an artery, between the part tied and the nearest branch, there are numerous well-attested facts that might be mentioned, which establish the occurrence. Surgeons have also been aware, that at times no coagulum of this sort is formed, and yet that secondary hæmorrhage does not follow. We presume that the fair interpretation of the passage is, that Mr. Guthrie has long been inclined to deny the necessity, and disbelieve the frequency, of the deposition of such a coagulum. The present case is remarkably in point.

Before we quit the case, we must venture to observe, that we cannot understand how the common iliac artery could be carried forwards with the peritoneum. Its anatomical relations would seem, *a priori*, to forbid such a displacement.

Again we offer Mr. Guthrie our con-

gratulations on the manner in which he performed the operation. Much as it does him honour, his candid narration of the issue of the case is calculated to increase his genuine reputation.

RECLAMATION OF VALENTINE MOTT,
ESQ. WITH REFERENCE TO THE
OPERATION OF TYING THE COM-
MON ILIAC ARTERY.

We cordially publish the following letter from Mr. Valentine Mott, one whose reputation should be dear to America. It is singular that it should arrive at a time, when the result of the operation performed by Mr. Guthrie on the common iliac artery has been such, as to give the palm of success to Mr. Mott. But success is, after all, a false touchstone of merit; and the character, both of Mr. Mott and Mr. Guthrie, will be measured by a fairer and a higher standard.

New York, 25, Park Place,
June 10th, 1834.

SIR,—As the individual upon whom I operated, in the year 1827, for ligature of the *arteria iliaca communis*, is still living, may I ask of you the correction of the following sentence, in the "Medico-Chirurgical Review" for Jan. 1834. "Thus this most formidable operation has been successfully performed for the first time, and while it adds a wreath of laurel to the brows of the distinguished surgeon, it exhibits a splendid triumph of British surgery."*

It is worthy of remark, that Mr. Guthrie has committed the same error in his work, p. 365—"on the Diseases and Injuries of Arteries," especially as the case is quoted from the "American Journal of the Medical Sciences," the last paragraph of which is in the following language:—"The gratification his visit afforded me is not to be imagined, save by those who have been placed under similar circumstances.† The perfect success of so

important and novel an operation, with the *entire restoration of the patient's health*, was a rich reward for the anxiety I experienced in the case, and, in a measure, compensated for the unexpected failure of my operation on the *arteria innominata*."

While justice to American surgery requires that I should make this statement, I shall always be ready to award to the British school the merit it is so justly entitled to, and of which I am proud of acknowledging myself to have been a pupil.

With great respect, I have the
honour to be,

Your obedient Servant,
VALENTINE MOTT.

To JAMES JOHNSON, M. D.
*Physician Extraordinary
to the King.*

FRACTURE OF THE SKULL, WITH DE-
PRESSION. OCCURRENCE OF CONVUL-
SIONS, AND CURE.

Mr. Cotton, an intelligent surgeon of Bagshot, has communicated an interesting case of this description to the *Lancet*.* We shall briefly state the particulars.

Case. A boy, æt. 14, was thrown against a gate, and trodden by a horse, at 10, a. m. of the 4th July. There was a lacerated scalp-wound above the external canthus of the left orbit—a puffy swelling on the zygomatic arch—and a simple fracture of the parietal bone, embracing its posterior half, and extending obliquely forwards, to the junction of the squamous portion of the temporal with the greater ala of the sphenoid bone. The bone was depressed, and the scalp much puffed. There was bleeding from the nose and mouth—there was a state of drowsiness, alternating with shrieking, and

five miles, nearly three months after the operation.

* Aug. 9th, 1834.

* Mr. Guthrie's case.

† The patient having come twenty-

efforts to remove himself from the bystanders—the pulse was labouring and quick.* The head was shaved, and cold lotion was applied, shortly after which the patient was seized with violent convulsions, and distressing attempts at vomiting. These symptoms continued for an hour and a half, and ended in complete insensibility. The pulse was now labouring, irregular, 56—the pupils permanently dilated, and insensible to the application of a lighted candle—the respiration stertorous.

VS. ad 3xxx. 3j. of Calomel, placed upon the fauces. Enema of muriate of soda, colocynth, and jalap.

Several copious evacuations were procured, and at 2, p.m. four hours after the accident, the symptoms were somewhat relieved. At 7, p.m. the patient was sensible on being roused, and complained of excruciating pain in his head. Pulse soft, 76—skin warm—tongue furred. The slightest pressure on the seat of fracture produced convulsive movements. *Lemonade was ordered as a drink, and salines with Epsom salts were prescribed as medicine.*

He passed a restless night, repeatedly attempting to get out of bed, and talking incoherently. Next morning, the skin was hot and dry—the pulse sharp and 86—the tongue furred—the pupils sluggish and dilated. He was drowsy, but conscious when moved and still complained of severe headache.

VS. ad 3x. Calomelanos, gr. ij. o. 3tiá horá. P. c. aliis.

In the evening, the symptoms were sensibly relieved, and after that time, the amendment of the patient was progressive, though slow. We need not pursue the details. The report of Mr. Cotton concludes upon the 21st, seventeen days from the reception of the injury. The wound of the scalp was then healed. No unpleasant symptom remained, excepting a slight deafness. There was no perceptible depression of bone, "but an evident callosity in the course of the fracture."

Whatever the nature of the fracture

and extent of the depression may have been, a careful consideration of the particulars of the case will convince the experienced surgeon, that moderate pressure on the brain existed. That the pressure *was* moderate, is proved by the presence of convulsion, and concomitant absence of long-continued stertor and coma. The observations of Mr. Brodie, the records of facts, and the study of the symptoms and pathology of hydrocephalus, establish the important fact, that convulsions are a consequence of comparatively slight compression of the brain.

The treatment of the case before us was as judicious as successful. We may equally approve the early and the secondary management—the application of cold, the venæsection, and the purging in the first instance—the steady exhibition of calomel, when the symptoms of fever and the pain in the head became indicative of the supervention of inflammatory action. This is the practice we have taken repeated opportunities to recommend, and it gives us great pleasure to offer Mr. Cotton the advantage, small as it may be, of the cordial approbation of this Journal.

THE CHOLERA.

Our readers may probably remember that, when the cholera prevailed, we devoted much space and some trouble to the subject, and endeavoured to lay before the medical public all that was interesting, important, or novel with respect to it. We see no reason to regret the course we thought it prudent and right to pursue. We endeavoured to allay unnecessary apprehensions, and dispel unreasonable terror—we denied the virulent contagiousness of the malady, and doubted its power of extensive mischief in this country—we denounced vexatious quarantine regulations as useless, and, consequently, bad—we reprobated the attempt to coerce the dearest feelings and the prejudices of the people by legal enactments and the interference of police—we ridiculed the mummery of fasts and

* It seems difficult to reconcile the two conditions.—REV.

fumigations, and midnight burials—and last, not least, we did our best to expose the enthusiasm, or the quackery, of “legally qualified” gentlemen, who confidently published their nostrums and their cures, at a time when the mortality was notoriously at its highest.

We do not intend to re-argue the nature and the causes of cholera. Of the former, we know as little as we ever did—and the latter are enveloped in equal obscurity. Extreme opinions have, we trust, been softened down—the bitterness of party has expired with the occasion—and we think we may assert, that the majority of well-educated, practical, and reasonable men have arrived at nearly the same conclusions, and act on very similar principles. None dream at present of advocating quarantine—few entertain the idea or the wish of alarming the public with the notion of contagion—all are convinced that, in the great mass of cases, care on the part of the individual affected, and judgment on that of the medical attendant, will be amply sufficient to obviate the occurrence of malignant symptoms, or of serious consequences—and most are convinced, also, that when, from imprudence, from inattention, or from any other cause, the worst features of the malady have appeared, remedies of all descriptions are too generally powerless. The common sense of intelligent practitioners has led them to regard the vaunts of successful treatment, in *such* cases, as idle fancies or unblushing falsehoods.

Those who are familiar with the history of cholera are probably aware, that at the time when it was committing its greatest ravages in Hindostan, the newspapers of that province teemed with the accounts of successful remedies. So fatal were the consequences of these daily cures, that the government was compelled to prohibit their publication. We do not know that the evil has been quite so formidable in this country; but, whenever the disease has been most prevalent and fatal, we have always remarked that most specifics, or pseudo-specifics, are made public. In the Autumn of 1832, the weekly, the

monthly, and the quarterly medical journals were rife with proposals of the most opposite descriptions, resembling each other only in their success. Mr. A. amazed the public with a series of cases of the most malignant cholera, triumphantly treated with calomel and opium—Mr. B. looked with horror on that murderous practice, and effected all his cures with cold water—Mr. C. was successful, by preventing his patients from slaking their agonizing thirst, although, like Dives, they implored but one drop to wet their lips. Dr. D. administered fluids by buckets-full through the mouth, the anus, and the veins. All were sanguine, all victorious, and the difficulty was, not to discover a specific, but to choose one. Some simple persons were delighted with all this, and rapturously received each Shiloh as he came. But the rapid succession of miracles and prophets at length proved too much for even the most credulous digestion. The true believers were forced to confess that they had thrown away their faith on false divinities, and were compelled to fly for comfort to the fond idea, that a genuine specific existed somewhere, though, like Solomon's seal, its possessor was unknown. It is not impossible, said the *Lancet* of that day, “that a specific for cholera has already been discovered.”

It may seem that we are talking of things that were, of follies irrevocably past, and of credulity not likely to revive. A moderate acquaintance with mankind is sufficient to stamp the truth of the remark, that experience seldom instructs the mass. The deceived and abandoned credulity of yesterday is enacted on the stage of to-day, and the same performers are often seen to play again their proper parts. His Majesty's medical subjects are, at this very moment, exhibiting a pantomime of this description.

When the epidemic cholera first commenced its career in this country, the practice in which most confidence was placed was venesection, and the exhibition of calomel and stimulants. A brief experience was sufficient to convince all unprejudiced practitioners,

that cases of a really formidable character were not amenable to these remedial measures, however rational their employment might appear. Then succeeded, at a rapid pace, the advocacy and the trial of innumerable modes of treatment, some more and some less plausibly supported, but all, without exception, brought forward by their parents: as successful, in cases of the worst description. It would be tedious, and it is unnecessary, to recount in due order the rise and fall of these successive methods; but a brief enumeration of the principal may be of service. Waiving a very strict attention to chronology, they may constitute the following list:—Stimulants and frictions—large doses of calomel—small doses of calomel—calomel and opium—emetics of mustard, of common salt, and of tartarized antimony—salines by the mouth, by the anus, by the veins—water of all temperatures and in all quantities—no water at all—the application of heat—the application of cold—drugs beyond number, and of every conceivable mode of operation—bandages on the abdomen. We will not fatigue our readers nor ourselves by attempting to extend this heterogeneous catalogue. But one observation may be usefully permitted. Each successive contributor of a method or a drug denounced the mischiefs, or deplored the inertness, of those which had already been proposed. The water doctor cried “murder” when calomel and opium were employed—the patron of emetics pitied the weakness of the water doctor—and the sturdy advocate of calomel or of stimulants looked with derision upon both.* Amongst the audience that surveyed the performance of this play of many parts, some individuals looked on with philosophical incredulity and apathy; but the multitude were caught by each clever

juggle, and rapturously cheered each dexterous actor.

From the hasty sketch of what *has* occurred, let us turn for a brief space to the present scene.

Early in the Autumn, many cases of diarrhoea, and some of cholera, were observed in the metropolis. Towards the latter end of August, a sudden and a great alteration took place in the temperature and in the weather. The thermometer sunk rapidly fifteen or twenty degrees, and sultry days were followed by nights of actual coldness. The attacks of diarrhoea multiplied, and insulated instances of malignant cholera soon became whispered abroad. Few medical men, in extensive practice, failed to see decided cases of the malady, and, about the close of August, its prevalence and its severity had become incontestable. Now came the private panic and the public gossip—dietetic *leaders* in the weekly Journals—and a dinner of the market-gardeners, at which fruit was ostentatiously devoured, and cholera boastingly defied—and now, above all, came the insulated cure or the general specific—the drama, in short (a tragedy and farce), of the previous years were advertised again, the old dresses furbished, and the old actors rouged.

It seemed as if the fond illusion of the *Lancet* was realized at last—as if the specific which it thought might exist, but had not been discovered, was at length presented to the public. In the Number of that Journal for the 23d of August, a communication appeared from Mr. Beaman, announcing a remedy “so extremely successful,” that he laid it before the profession and the public. That remedy is applicable, and Mr. Beaman desires that it may be thought so, to cholera, in its worst and most aggravated form. In that form, it had cured “no less than eleven consecutive cases.” It must be owned, that a remedy which can lead to a happy issue so great a number of malignant cases must, indeed, be a boon to afflicted humanity. It is—emetics of common salt!

Many might deem that the plan of

* This is no idle flourish of words. Every observation in this article, sarcastic or rhetorical as it may appear, is founded on the recollection of circumstances that have occurred.

emetics had already been sufficiently tried and found wanting; and that the melancholy experience of preceding years had demonstrated their real value. Our contemporary does not think so. He considers the communication of Mr. Beaman as "one of the most important that has been made connected with the treatment of malignant cholera"—he entreats his brethren to try the remedy, and to note down the results of their observations—and he opens an editorial cholera-box, not "for long detailed cases, which would require much time in the *concoction*," but simply for those leading facts sufficient to answer every good public purpose. In a subsequent number a mild attempt was made by another gentleman to urge the claims to public notice of the "*pil. ceræ, phos.*"* But the editor checked the impertinent intrusion, and observed that the preference must be given to communications illustrative of the effects of salt-water emetics. Mr. Wardrop, perusing with attentive satisfaction the important observations of Mr. Beaman, forwarded without delay some remarks from Dr. Hoskins, a communicant from Guernsey. Those remarks are so brief that we will venture to insert them.

"When the disease visited us two years ago, we found common salt and water the best remedy. Its superiority to any other plan forced itself upon our attention, and our Cholera Hospital became extremely popular as a medical asylum, with all ranks and classes. I may mention, that out of sixty-two cases admitted into the hospital in the third stage, and treated solely with solutions of salt, forty-six recovered, and only sixteen died, whereas the mortality following the opiate and stimulant treatment was about sixteen in thirty-seven. At first I adopted the opiate plan, but

soon afterwards became a convert to the saline."

Mr. Wardrop and the *Lancet* would appear, unless we misconceive the words and the meaning of Dr. Hoskins, to have misunderstood his treatment. He makes no mention of salt and water as an emetic, but gives it after the *saline* fashion. This is a different affair.

It requires no gift of prophecy to foretell, that before this article is published, salt and water emetics will probably have given way to some other equally successful plan of treatment. We would not swear that the *pil. ceræ phos.* will not be in vogue on the first of September, and we think it very likely that the immortal Dr. Stevens will be actively dispensing the inestimable blessings of salines. Damaged rice, we perceive is pouring into the market, and since Dr. Tytler, Cassandra-like, is unheeded, there seems every reason to believe that the next few weeks will be prolific in opportunities for the friends of humanity to perform their cures and to publish their specifics.

In conclusion, we may offer a few observations on what appears to us the most rational manner of regarding and of treating this singular complaint.

The variety of symptoms displayed by different individuals would seem to preclude the probability of any single remedy becoming applicable to all. If we take the worst cases, we find in one the vomiting distressing and incessant—in another, purging is the prominent characteristic—in a third, the collapse is out of all proportion to either of the former symptoms. In this, as in every other disease, the practitioner should study the features of each case, and regulate his practice by the character they wear; he should also consider the age, the constitution, the habits, and the powers of the patient. In the majority of instances, diarrhœa continues, as before, the preliminary symptom. We have heard it remarked, that collapse is more sudden, and death more rapid than in former years. Our own observation would lead us to doubt the correctness of the supposition.

We have never found the diarrhœa

* This useful abbreviation is probably typical of *pilula ceræ phosphorata*, a compound, we may suppose, of phosphorus and wax. We presume that this mixture of combustible materials is chiefly adapted for the cold stage.

resist a dose or two of calomel or blue-pill, combined with opium and some essential oil, and succeeded by aromatic draughts containing rhubarb with hyoscinus, and generally the liquor opii sedativus. These remedies, assisted by quiet, confinement, and restriction to slops, have not failed in any instance we have seen to arrest an attack of diarrhoea.

In cases of cholera, that is of vomiting and purging, of moderate severity, the exhibition of small doses of calomel and opium, accompanied with effervescing draughts containing laudanum, and with opiate enemata, if the purging is considerable, are the means we usually employ. The patients should, of course, be confined to bed, and warmth or mustard sinapisms must be used, if necessary. Emetics are always beneficial in the first instance. They sometimes arrest the vomiting immediately, and they always appear to facilitate recovery. Beyond this we doubt if emetics are of much service, and certainly we would not dream of allowing them to usurp the office and the place of the other remedies we have mentioned.

In the very worst cases of cholera we really believe that it signifies little what may be done. Death occurs in the great majority, and those that have done well, have been treated in such various ways, that it appears impossible to attribute much to any one method. Under such circumstances, the safest practice is usually to trust to those general principles, which are themselves the sum of many facts, and the results of the extensive observation of disease. If much coldness and collapse are present, the application of external heat and of sinapisms appear reasonable and has proved of service—if the thirst is excessive, fluid should be granted, the quantity and the temperature being regulated by the wants and the wishes of the patient—if the vomiting is very violent and continual, the less that is given by the mouth the better—the purging should be met by starch injections with opium—and if prostration is urgent, stimulants in some shape do really appear to be imperatively re-

quired. We must say we are advocates for the moderate employment of calomel. If the vomiting and purging are severe, it is better to combine it with opium—if not, the quantity of the latter should be small, or it may probably be usefully dispensed with. We have said that if sickness is a prominent symptom, it is better to avoid, as much as possible, exhibiting medicine by the stomach. Under such circumstances, when collapse was urgent, we have, on several occasions, adopted with much apparent advantage, the plan of administering every hour or two, enemata of small quantities of beef-tea, arrow-root, brandy, and laudanum in conjunction. In some cases of seemingly hopeless collapse, reaction was established under this management. Calomel, with or without opium—effervescing opiated draughts, if the stomach will at all retain them—enemata with laudanum if the purging is severe; of beef-tea, arrow-root, laudanum, and brandy, if sickness constitutes the principal feature—warmth and sinapisms on the surface—and the fluid the patient may prefer, commonly cold water, form our general system of treatment in the worst cases of cholera. There are many particulars on which we will not enter, and much must, of course, be left to the tact and the judgment of the attendant on the case.

Of bleeding we will only say that, although it is of service in robust individuals, and in the earlier stage of the complaint, it is seldom advisable under other circumstances.

But the surgeon or physician must carefully watch the symptoms that occur on the subsidence of the collapse. Then is the period for local congestion—then is the time when the seeds of irremediable mischief are sown in the head or in the intestinal mucous membrane. It must not be forgotten that those who die in the second stage, are generally cut off by inflammation or ulceration in the mucous membrane of the bowels: or, by congestion, perhaps inflammation of the brain. The case is one of typhus, in the true acceptation of the term; as such it must usually be treated. The moment any organ ap-

pears involved, leeches should be instantly applied and repeated as necessity requires. Calomel or hydrargyrum cum creta, in two or three grain doses, should be given three or four times daily—aperients of rhubarb to carry off depraved, and promote the restoration of natural secretions, should be cautiously but steadily employed. Under these or similar measures many patients will recover, (we mean they have done so,) whose situation appeared most gloomy, if not actually desperate.

Such are the results of the experience of those whose opportunities entitle them to the privilege of pronouncing an opinion—who have looked at the disease as practical men—who have tried and witnessed various methods—who have no exclusive partialities, nor any object to attain—and who merely relate, in a hurried and imperfect manner, what they have found to be consistent with facts. Without attempting to discourage experiments, they cannot avoid expressing the belief that hitherto they have succeeded in establishing only the general inefficiency of any particular class of remedies.

CASE OF CHRONIC ENLARGEMENT OF THE CLITORIS, REMOVED BY MEANS OF LIGATURE. By JAMES EDWARD, Surgeon, Forfar.

The following case has been communicated to us by Mr. Edward. He appears to have treated it with skill, and to have removed the disease with decision. We have seen several instances of similar alteration of the prepuce, of the clitoris, of the labia, and of the nymphæ. We think that excision is usually preferable to the employment of the ligature. It is more expeditious, less painful, and productive of no risk or inconvenience.

"In December, 1833, Mrs. Lindsay, about 40 years of age, consulted me regarding her complaints. On inspection, the clitoris was found to be about eight inches long, and of a pyriform shape. The pedicle of the tumor was firm, and about the thickness of the

wrist; the most depending part of it hard, and fully larger than two fists. The nymphæ were elongated, and covered with a dry, smooth, and pale-coloured cuticle, pretty thickly set with small warts. The clitoris presented a similar appearance, except having none of the warty excrescences. The mucous membrane, having lost its secreting power, was become smooth and dry, and, by reason of the external position of the parts, was converted into an opaque, insensible cuticle. The sensibility of the parts, when elongated so as to project beyond the labia, was greatly impaired. With the exception, however, of being of a solid and fibrous structure, instead of a loose and spongy texture, they were not, in any other respect, morbidly changed. The disease was of two years' standing, and had commenced shortly after the patient's having undergone a course of mercury for syphilis.

While the external parts were held aside by an assistant, the clitoris was pulled out as far as possible from under the pubes, and a ligature applied close to the base of the tumor.

Excruciating pain was complained of during the first day, after which it gradually subsided. The ligature was tied every day for eight days, at the end of which the tumor dropped off.

LITERATURE OF THE QUARTER.

We purpose, in this manner, to introduce to our readers a few works, which we cannot, with advantage, consider in separate and ceremonious articles. Our bibliographical record is devoted to the enumeration of books which we receive—our review department to works which deserve analysis, or must submit to criticism—and this corner may serve for the reception of those which merit some, but are not adapted for a lengthened notice. Let us look upon our list.

I. ILLUSTRATIONS OF THE EFFECTS OF POISONS. By GEORGE LEITH

ROUPELL, M. D. The Plates from Original Drawings, by AND. MELVILLE M'WHINNIE, M.R.C.S. Part II. Eighteen Shillings.

The former part of this useful work was noticed in a former Number of this Journal. The part in question contained four illustrations—the present exhibits a similar number. The first represents the effects of concentrated sulphuric acid—the second those of a large dose of oxalic acid—the third displays the consequence of a large dose of corrosive sublimate—and the fourth the condition of the mucous membrane produced by alcohol. The first illustration is drawn from poisoning and the human stomach; the originals of the other three are the stomachs of dogs that had been subjected to experiments.

1. *Effect of Concentrated Sulphuric Acid.*

A boy, æt. 2½, drank inadvertently some strong sulphuric acid. Immediately after swallowing the poison, he fell on the floor; when raised, his tongue was swollen and protruded from his mouth, and he complained of acute pain at the epigastrium. Medical assistance was quickly procured. The carbonate of magnesia was given, which occasioned active effervescence in the mouth. Castile soap in solution was afterwards administered; vomiting then came on, and acid matters, partly composed of food, were rejected from the stomach, followed by a large quantity of black, grumous blood. Leeches were applied to the epigastrium. No re-action followed the depression, which resulted from the injury to the stomach and œsophagus. The skin was cold. The pulse scarcely perceptible. The little boy remained perfectly sensible and in a state of comparative tranquility until his death, which took place within twelve hours after the accident.

Dissection. The external marks consisted in vesication and discoloration of the lips, and in a hard, brawny patch on the left cheek, about the size of a

half-crown, and of the colour of parchment.

The tongue and inner part of the mouth were of a dirty grey colour.

"The inner lining of the œsophagus was puckered, dry, hardened and brittle; it was readily detached from the parts beneath and came off in small scale-like portions.

The coats of the stomach were thin and allowed the contents to be seen through them. When opened, the whole of the mucous membrane was of a dark colour, apparently stained by a bloody fluid, four ounces of which were contained in the stomach.

The large end was in no respect altered in texture, but the whole circumference of the smaller end, about midway between the œsophagus and pylorus, was black, irregular, rough, and thickened. The change which had taken place here was the destruction of the mucous membrane and the effusion of blood from the injured portion, some of which had coagulated, and adhered to the part acted on by the acid.

There was no perforation of the coats of the stomach in this instance, nor was there any inflammation of the peritoneum. Life was apparently destroyed by sympathy of the brain with the injury to the stomach and œsophagus."

Dr. Roupell observes that the yellow stain, so remarkable in cases of poisoning by nitric acid, was no where visible in this instance. The plate representing the interior of the stomach and œsophagus is probably correct, and certainly well executed; yet it is devoid of that pictorial exaggeration and gaudy colouring so frequent in plates of morbid anatomy.

2. *Experiment to show the Effects of a large Dose of the Oxalic Acid.*

Two scruples of oxalic acid, dissolved in an ounce of water, were introduced through a glass tube into the stomach of a small dog, by an aperture in the œsophagus, which was subsequently tied, to prevent vomiting. In a few minutes the dog made urgent attempts

at vomiting; these were interrupted by cries of distress, and renewed with very little intermission until its death, which resulted in half an hour from the administration of the poison. In this case the animal remained curled up in the basket into which it had been placed after the operation.

(Another dog, to which a drachm of the acid was given, exhibited nearly the same symptoms; vomiting came on in five minutes; in ten minutes the hind limbs were paralyzed, and death resulted in twenty minutes. Muscular contractility was nearly destroyed in this case; the heart scarcely contracted on the application of stimuli, though made immediately after death.)

Dissection 24 hours after death.—The œsophagus was natural in its appearance.

The stomach was vascular externally, and the hour-glass contraction was present. "It contained about four ounces of a dark-coloured, thick tenacious fluid at the larger end, which had stained the mucous surface. The coats were generally pulpy, softened, and had a white transparent appearance, but no perforation had taken place.

The duodenum was red, and presented dark coloured lines corresponding with the projecting rugæ, which had the appearance of being charred."

Dr. Roupell remarks, with apparent justice, that the black matter contained in the stomach was, in all probability, effused blood, altered by the acid.

3. *Experiment to show the Effect of a large Dose of Corrosive Sublimate.*

A drachm of corrosive sublimate was introduced, as in the last experiment, into the stomach of a dog. The animal was greatly depressed, but remained tranquil, and exhibited little outward signs of pain. It was alive between four and five hours after the administration of the sublimate, but was found dead when seen afterwards.

Dissection 22 hours after Death.—The œsophagus was natural.

The stomach, externally, was highly vascular. It contained several ounces of a thin, dark-coloured fluid. The whole inner lining was of a leaden

hue; this was the mucous membrane, which appeared to be universally in a state of slough, but it was in no part detached.

The duodenum, at its commencement, presented a mixed appearance, partly red, partly of a lead colour, as if the irritant and corrosive effects of the poison were here blended; the mucous membrane was thickened and had a roughened aspect.

The whole of the small intestines were inflamed, a thick white mucus being generally effused upon their mucous membrane.

Dr. Roupell remarks that, probably, the quantity of corrosive sublimate administered in this experiment, is greater than would be voluntarily or accidentally swallowed. From this circumstance, the morbid changes usually produced in the stomach resemble those observed in the œsophagus in this instance.

4. *Experiment to shew the Effect of Alcohol upon the Mucous Membrane.*

An ounce of rectified spirits, mixed with an ounce of water, was introduced into the stomach of a large dog. In a few minutes it ran about in a hurried manner, uttering a bellowing sound, and making attempts at vomiting. In ten minutes, it was "dead drunk." Next day it was so much recovered, that it was killed by a blow upon the head, and immediately examined.

The œsophagus was natural.

The stomach was slightly vascular externally, and presented a well marked hour-glass contraction. It contained an ounce of a thin bloody fluid, mixed with frothy mucus. The rugæ were prominent, and those of the large extremity were almost universally covered with patches of ecchymosis of a deep crimson colour. The intervening portions of mucous membrane retaining their healthy appearance.

The more usual appearances, after taking spirits, says Dr. Roupell, are not such intense congestion as in this instance, but a dusky-red colour of the membranes. Cases, however, have occurred, where death has resulted from a large quantity of spirits swallowed at a

draught, yet no obvious alteration of structure could be detected. In these instances, we may suppose that the action of the alcohol upon the nervous system has been so powerful as to destroy, before any local alterations were produced.

The experiment shews the mode in which the abuse of ardent spirits affects the mucous membrane of the stomach. The gin-drinker always suffers from chronic gastritis, and the mucous membrane is found on dissection thickened or softened from chronic inflammation. The liver incessantly stimulated, takes on a form of inflammatory action also, its acini become enlarged, and at last the tuberculated condition is produced. When to these more obvious and immediate consequences of the use of ardent spirits we add the frequent concomitants and sequelæ—the hypertrophic heart, the thickened tunics of the arteries, the consequent apoplexy or dropsy—or, in weaker constitutions, the phthisis, perhaps the malignant disease—we have pictured to ourselves the happy proselyte to the worship of Gin, his prostrate adorer in those whitened sepulchres, his modern temples. And this, as Benedict says, is our conclusion.

II. FRAGMENTA DE VIRIBUS MEDICAMENTORUM POSITIVIS, SIVE IN SANO CORPORE HUMANO OBSERVATIS.—

A SAMUELE HAHNEMANN, M.D. &c. &c. &c. Edidit F. F. QUIN, M.D. &c. &c. &c. Londini. Veneunt apud S. Highley, MDCCCXXXIV.

This is altogether an extraordinary work, extraordinary at least considering that it is edited, printed, and published in the city of London, in the year of our Lord 1834. What physician, surgeon, or apothecary would dream of writing a book in Latin?—Who are to be the readers?—The profession? It will never peruse one page, unless some unhappy dog-eared critic shall deem himself in duty bound to “pause and ponder and ponder and pause” at its curiously concocted paragraphs. If the faculty eschew the re-

markable production, we are sure it will never find favor with the public. No general reader, in fact, could understand it. The whole affair is a phenomenon.

Quale portentum neque militaris
Daunia latis alit esculetis;
&c.

A clerical admirer of homœopathy has ventured to indulge in the auspicious prophecy, that the period will arrive when Hahnemann, “that young man,” will come on us like Punch in all his glory. The dogmatists and the empirics, and the proselytes and professors of all other sects in the pantisocracy of medicine, should make the most of the time they have, for their days assuredly are numbered. If prodigies and portents usher in revolutions and wait on the rise and the fall of dynasties—if Brutus cannot plant a dagger in Cæsar, without exciting the wrath of a comet, and turning the solar system topsy turvy—we may fairly suppose that the fall of the ancient science of medicine will excite some little pother in the land of spirits, and set those deities, or gnomes, or sylphs, or whoever else the scene-shifters may be, to contrive some omen or portentous accident, which may lead the most thoughtless to expect a change. Such an omen we consider this book. Good God! only to think of our publisher, Mr. Highley, being involved in the diablerie. He has certainly sold himself to Mephistopheles, and his family may find in some secret drawer a bond, apparently written, in red ink, but actually signed, oh horror! in his blood!—Poor Mr. Highley!

The charming or charmed pages (their number is exactly 212) are occupied with an enumeration of the mystic properties of certain chemicals or drugs, amongst which we may enumerate the aconitum napellus—arnica montana—atropa belladonna—chamomilla matricaria—cocculus menispermum—copaifera balsamum—digitalis purpurea—ipêcacuanha—ledum palustre, and various other pharmaceutical simples—some of which are usually considered active, whilst others are commonly deemed inert in their effects.

Midas, we all know, had the faculty of turning what he touched to gold. We will not affirm, nor will we even hint that Hahnemann or his disciples enjoy the power, nor express the wish to convert the cube root of rhubarb to a sovereign, or the infinitesimal extraction of the chamomilla matricaria to half a guinea neatly wrapped up in white paper. But we do maintain that the new doctrine is possessed of the marvellous property of making all it touches homœopathic—and that facts, conclusions, observation, experience—all become invested with new faces and new forms when fused in its alchemical alembic. We may take the instance of feverfew—matricaria chamomilla.

The carelessness and ignorance of the old system of physic condemned this potent remedy to banishment from the shelves of the chemist and apothecary. Its name was seldom seen but in treatises on botany, and its virtues were appreciated in the recipes of old women, rather than in the orthodox prescriptions of doctors. Yet the wand of Homœopathy has converted this desert to a garden, and the forsaken feverfew blushes to find herself diffused through thirteen goodly pages, and adorned with two hundred and seventy-two properties! The astonishment of the reader at the pleasing change resembles that of the hermit in the ballad, at recognizing in his guest a lovely maid.

The bashful look, the rising breast,
Alternate spread alarms;
The lovely stranger stands confest
A maid in all her charms.

Some of these properties, we allude to the feverfew and not to Angelina, are singular and unexpected. We shall signalize a few. The 29th runs thus:—

“Cogitationes, ideæ, evanescentes.”

The 45th requires that an infant should be dandled; for, a fact so remarkable, that, unless well attested, we could not have believed it, the baby grows restless if not in arms.

“Non nisi gestatus quiescere potest infans.”

The 51st evinces the accurate observation of the homœopaths. A patient who imbibes the matricaria chamomilla grows sulky for exactly the period of two hours.

“Morositas per duas horas durans.”

The 88th property particularizes a species of discriminating tooth-ache, which is probably familiar to the dentists. The singularity consists in the tooth contracting a violent antipathy to coffee.

“Odontalgia post haustum calidum (maximè coffeæ) potum sæviens.”

But the 102d and 103d qualities of feverfew are more wonderful. Under its influence the teeth begin to elongate, like the faces of the professors of the old system of physic, and, what is more, they actually stagger.

“Dentes elongati.”

“Dentium vacillatio.”

We think it would be useless to add to the extraordinary catalogue. We assure our readers that these are not choice flowers, discovered with difficulty and selected with care. They came in our way, and so we plucked them; and any one who wanders through the thickly-planted pages of this curious work, may gather at each turn as extraordinary specimens. It would be idle to eulogize the facts of homœopathy; displaying as they do the brilliant imagination of the homœopaths; in point of ingenuity they appear to us to excel the doctrine. None can, of course, doubt that the new system will soon rise to strength and maturity on the ruins of the ancient errors, of experience, observation, and induction; and, selfish though it may appear, we congratulate ourselves on having discerned its lurking beauties and its infant vigour, at the time when the fools and bigots of the 19th century rejected and despised it.

THE PRINCIPLES OF DIAGNOSIS, VOL. I.
Second Edition. By MARSHALL
HALL, M.D. F.R.S. L. and E. etc.
Octavo, pp. 426. London, 1834.

It is a pity that Dr. Hall has not mentioned in a preface or advertisement of some description, the alterations, additions, or reductions he has made in the present edition. Harassed and perplexed as the critic is by the claims of authors and the multiplicity of books, he cannot be expected to com-

pare editions, and to extricate a few separate grains of novelty from bushels of familiar matter. We would recommend those gentlemen whose merits or whose fortune convey them past the rubicon of a first edition, to signify the changes that occur in all successive ones.

In the present instance we are prevented from doing adequate justice to Dr. Marshall Hall, by our inability to inform our readers of the real quantity of added matter or improved arrangement. But the fact of a second edition being called for, is itself a high compliment to the author and the work, as the latter is one which, for obvious reasons, can only be purchased and appreciated by the profession.

We have on various occasions endeavoured to do justice to the industry and the talent of Dr. Marshall Hall. Indeed, our previous notice of his labours was so full as to prevent us from doing much more than mention the appearance of this new edition, and recommend those to purchase it immediately who have not the advantage of possessing the first. We may glance at Dr. Hall's arrangement before we quit the subject. The work contains four sections. The first is occupied with the history of diseases—the second is devoted to their symptoms—the third is occupied with the effects of remedies—and the fourth is appropriated to their morbid anatomy. The second section is, of course, the longest. It treats in order of the morbid appearances of the countenance—the morbid conditions of the attitude—the morbid appearances of the tongue, &c.—the morbid conditions of the general surface—of some morbid conditions of the general system—of the morbid states of the functions of the nervous system—of the morbid affections of the function of respiration—of the morbid affections of the circulation—of the physical conditions of the thorax—of the functional affections of the alimentary canal—of the functional affections of the urinary organs—of the physical conditions of the abdomen.

Such is our author's bill of fare, and as we cannot praise particular dishes,

we recommend the whole. Our readers may taste and judge for themselves. By the way, we may mention that the doctor is about to give oral utterance to these principles of diagnosis. In other words, he is the future lecturer on the practice of physic at the Aldersgate Street Medical School. We wish him all the success he deserves, and that is not a trifle.

IV. A DEMONSTRATION OF THE NERVES OF THE HUMAN BODY. By JOSEPH SWAN. Quarto, pp. 82. Plates, XXV.

We have drawn attention to Mr. Swan's folio plates of the nerves. The four fasciculi of that splendid work do honour to Mr. Swan, and are creditable to the country. The laborious industry that executed the dissections, the patient zeal that directed and superintended the artists, and the graphic powers of the latter, have combined to produce a work unequalled in any period of the history of anatomy for its accuracy and its beauty. Cheap though it is, the actual price must prevent the great majority of the profession from buying it. Young men who want it most, can afford it least, and the older and wealthier members of the profession who are able to afford it, will not, perhaps, be persuaded that they want it. We fear then that the sale of the folio copy will never be extensive.

But the quantity of trashy anatomical plates which fill the market and disappoint and deceive the purchaser, renders it a matter of high importance to circulate good ones at the lowest possible price. Actuated by this laudable desire, Mr. Swan has now published in a quarto form the plates which are contained in the folio edition. The accuracy of the dissections, and the beauty of the drawings continue unimpaired—the diminished size is scarcely attended with diminished clearness—and the moderate price will enable students of indifferent means to purchase what is really worth their money and their time, instead of unprofitably consuming both in the acquisition and the study of what are neither decent drawings nor accurate charts.

We recommend all and every gentleman desirous of becoming perfectly acquainted with the anatomy of the nervous system, to make himself master of one or other form of these Demonstrations. If he does not enjoy a superfluity of cash, let him stint himself in some less important matter, and parents or guardians may well expend a pound or two in placing the work in the hands of the young aspirant for anatomical distinction.

V. AN ESSAY ON THE DEAF AND DUMB, &c. &c. Second edition. By JOHN HARRISON CURTIS, Esq. &c. 1834.

We have heard on good authority that in the instances of more than one individual, considered as irremediably deaf and dumb, Mr. Curtis has by strict attention and judicious treatment removed the deafness, and, of course, the dumbness. The facts which have come to our knowledge induce us to recommend practitioners to attend to the suggestions of Mr. Curtis, and in cases of this nature to pause before they doom to a sort of civil banishment, unhappy individuals whom cautious observation and appropriate management might restore to the advantages and pleasures of society. We have only time at present to direct attention to some of the details of Mr. Curtis' work, and to express our opinion that his cases and suggestions deserve consideration.

VI. A PRACTICAL TREATISE ON LEPROUS VULGARIS, WITH CASES THAT HAVE UNIFORMLY YIELDED TO THE PLAN OF TREATMENT LAID DOWN, &c. &c. By EDWARD BECK, M.D. Ipswich. Octavo, pp. 74.

The object of Dr. Beck is to display the obstinacy of leprosy and psoriasis—their indisposition to yield to the treatment usually recommended—and the superior efficacy of the plan which he proposes and pursues. Without further preface, we shall state the plan in question.

"When the disease is of considerable standing and attended with much pain, soreness, and inflammation of any

one part, a preparatory plan of treatment will be required, which is to be principally antiphlogistic.

I have generally recommended abstinence from wine, and prescribed a few doses of Aperient Medicine; equal parts of Pil. Rhei Comp., and Extr. Colocynth Comp. with or without two or three grains of Pil. Hydr. answer the purpose well. The Sulph. Precip., in combination with Sod. Subcarb. Excis. in doses of half a drachm of the former, to 5 grs. of the latter, two or three times in the day, so as to act freely on the bowels, has a beneficial influence in reducing the irritation. The Liq. Plumb. Subacet. Dilut., or a lotion containing the Plumb. Subacet. in combination with Zinci Sulphas, I have found the best local applications, during the very irritable state of the disease: two scruples of the former, with half a drachm of the latter, to a pint of Distilled Water."

The preparatory plan, therefore, consists of active aperients for some days—the application of the lotion that is found to suit best—and, when much local irritation exists, the use of the powder of sulphur and soda three or four times during the day. Sometimes there is no necessity for a preparatory plan of this description. As soon as the irritation and inflammation of the parts are moderated, the specific treatment is required.

"The specific plan consists in applying the following liniment to the parts affected:—

℞.—Picis Liquid.

Sulphuris.

Adipis Præpar. sing. unciam misce.

The following pills are at the same time to be taken regularly:—

℞.—Picis Liquidæ unciam dimidiam.

Flor Tritici q. s. misce. et divide in Pilul. sing. gr. v.—iii. ad vi. ter in die sumantur.

Where the irritation is very considerable, a milder liniment may first be had recourse to, as the following:—

℞.—Picis Liquidæ.

Sulphuris singul. unciam dimidiam.

Adipis Præparat. uncium. misce.

This preparation, should it irritate very much, may be gently rubbed on the parts affected with the Leprous eruption at night, allowed to remain on a few minutes only, and then wiped off with soft linen. The application usually increases the pain for a few minutes, but afterwards the parts become much more comfortable to the Patient's feelings. In three or four days the former liniment can be borne and will be required, and it may be allowed to remain on the part all night, and be washed off in the morning, or it may be applied and remain on for days together, for it is better that the part should not be frequently washed, as the local irritation is considerably increased thereby. Where a large surface, a limb for instance, is covered with the Leprous eruption, it may be gently rubbed well over with the liniment, and the part covered with linen (in the form of a stocking if it be the leg, or a glove if it be the fore-arm, or back of the hand.) Every second or third day will suffice to apply the liniment afresh. This is a very efficacious mode of applying the liniment, but is adapted only for those in the lower class of society, who might have no objection to the scent of the ointment. Among the upper class of society, this plan might be seriously objected to, in which case the application should be used at night only, and washed off in the morning. But where single patches are situated, some of the ointment should be applied thickly to them, and two or three pieces of lint confined over it, with strips of adhesive plaster—this may be allowed to remain for days together, and no scent can escape if the lint be well confined. Most of the small Leprous spots, which are not of long duration, will disappear under the general plan of treatment, and only an occasional large patch will require this attention for a short time.

As the Pills sometimes occasion head ache and disagree with the stomach at first, they may be commenced with by taking two, three times in the day, and very gradually increased to six, three times in the day, which will be found an efficient dose, and as much as most stomachs will bear well. The torpid

state of bowels that almost invariably accompanies Lepra, usually gives way to the use of the Pills.

Where the disease is of short duration, and is not confluent, the preparatory plan of treatment may, in a great measure be dispensed with, both locally and generally.

A single dose of the Pills at night, followed in the morning by a teaspoonful or two of calcined Magnesia, or half an ounce of the sulphate, will be found sufficient; but, without some preparation for the *Pilulæ Picis*, they will be found to occasion nausea and head-ache, at which the patient, taking an early disgust, will, with difficulty, be persuaded to resume the use of them. In all cases, where the local irritation is considerable, the stronger form of the ointment may, from the first, be had recourse to. After the patient is able to take a full dose of the pills, the use of aperients may, in almost every instance, be discontinued, for the *Pil. Picis* alone regularly and sufficiently act upon the bowels.

I particularly wish to point out the necessity, where much local irritation is present, of using the milder *Ung. Picis Comp.*, and that it remain on only a minute or two. Without this precaution, the patient may take a prejudice against the application, from the increase of pain it produces, and discontinue it altogether."

Both pills and ointment are necessary to effect a cure, and their use should be continued for some time after the disappearance of the disease. Two months, or even more, will be required for the cure of severe or long-continued lepra.

Our author's treatment of psoriasis is put forward with less confidence than that of lepra. It consists of antiphlogistic treatment while heat and irritation are considerable—aperients—after a few days the application of an ointment, consisting of half an ounce of camphor, and two ounces of *cerat. cetacei*—and the exhibition of sulphur and soda.

We have no space left for comments, which we leave to the fancy, the judgment or experience of our readers.

II.

SPIRIT OF THE FOREIGN PERIODICALS.**ON THE OPERATION OF STAPHYLOGRAPHY.**

Although the congenital fissure of the palate does not necessarily affect the health of the individual, it is a malady which causes him much distress, and often destroys the comfort of his existence. Every act of swallowing is a punishment; for the food, especially if fluid, is apt to pass through the cleft into the nasal passages, and be rejected by the nose; and the speech is usually so indistinct, that the unfortunate patient can with difficulty make himself understood.

It is therefore, surprising that surgeons had never made any attempts to remedy this defect, until MM. Graefe and Roux, nearly about the same time, proposed and practised the operation which has been called staphyloraphy. It must be confessed that the operation is one of very considerable difficulty and uncertainty, in consequence of the peculiar susceptibility and disposition of the parts involved. All the manipulations are performed within a contracted cavity, the walls of which, on the slightest irritation, are thrown into irregular and involuntary movements, accompanied with irrepressible efforts of vomiting and cough. The only method of overcoming these, is by endeavouring to accustom the throat, step by step, to the contact of foreign bodies. Even when this has been accomplished, the surgeon may find himself much embarrassed in his attempts to make the section of the cleft palate neat, regular or uniform, and to pass the needles and ligatures through the two sides at the wished-for points, so as to approximate them smoothly and equally. Any feasible proposal to facilitate these desirable ends must be received most gratefully by whoever undertakes the delicate operation of staphyloraphy. M. Berard, of Paris, suggests the following hints, the adoption of which, he believes, contributed essentially to his

success in one case. The operation, he says, consists of three stages, viz. the passing of the threads, the paring of the edges, and the tying of the ligatures. The points of the suture, on either side, ought to be exactly opposite to each other; the spaces between them must be equal, or nearly so, and sufficient thickness of substance must be included between any two opposite sutures, to prevent the ulceration of the interstitial parts before the adhesive union has taken place. The contrary error, that of including too great a thickness of substance, may, indeed be committed, and its effects are nearly quite as injurious, causing a most painful dragging of the velum and soft palate, and inducing a troublesome inflammation in these parts. It is, however, to be well kept in mind, that the failure of staphyloraphy is more often attributable to the former than to the latter of these errors.

M. B. strongly recommends that the sutures be made progressively from before backwards, and not in the opposite direction, as some surgeons have proposed and practised. In the second stage or period of the operation, the section ought to commence at the upper border of the velum; for this curtain, being fixed by its adherent edge to the point of the osseous palate, may be kept stretched by the pressure of the bistoury alone: some surgeons prefer scissors to a scalpel for paring the edges—it is, however, to be observed that, with the former, we are more apt to cut the threads than with the latter. When the incisions have been duly made, the next step is to approximate the edges, and to retain them in apposition by tying the ligatures. The most convenient of all “serre-nœuds” are the fore-fingers of the operator, which may generally be conveyed to the requisite depth; in some cases, indeed, considerable difficulty is experienced at this step of the operation, in consequence of the nausea and efforts

to retch whenever the fingers touch the palate or velum; also from the surgeon not being able to see distinctly the parts on which he is operating. M. Guyot has recently invented an ingenious instrument, by means of which he thinks that the surgeon will be enabled to tie the ligatures, without the introduction of the fingers into the mouth. Even after the operation has been satisfactorily concluded, the anxiety of the surgeon is not over, for he knows well the extreme difficulty of keeping the parts quiet and motionless; and, without this favourable condition, he cannot expect a serviceable union. Every effort of swallowing is necessarily attended with some movements of the palate; and although we may endeavour to nourish the system for a few days with beef-tea, enemata, and so forth, the thirst of the patient forces him to be taking every now and then a mouthful of drink, and even sometimes the urgency of his hunger is so intolerable, that he cannot abstain from wishing for food by the mouth.

It has been proposed to introduce food into the stomach by means of an elastic tube, conveyed down the œsophagus: if we intend adopting this method, it will be prudent to accustom the parts to the contact of the tube for several days previous to the operation. It may be useful to detail briefly the history of the case in which M. Berard performed the operation with success. The patient was a man, 27 years of age—he had the scar of the operation for hare-lip—his voice was hoarse, indistinct, and his speech very inarticulate. Upon examining the throat, the velum palati was found to be cleft in its middle—the fissure extended from the uvula to within two or three lines of its adherence to the palate bones; it was about an inch and a quarter in length, and had a triangular shape, the apex of the triangle being uppermost.

The palate itself, the soft as well as the hard, was quite entire. When the parts were in a state of repose, the breadth of the fissure was not more than three or four lines, but no sooner were they thrown into action, than the two halves were immediately drawn so

much asunder and upwards, that they could scarcely be perceived. For several days, M. Berard endeavoured to accustom the parts to the contact of foreign bodies, by repeatedly introducing his fingers into the mouth, and touching the parts which were to be the seat of the operation. Three sutures were employed, and great care was employed to insert each of them at about three lines, distance from the loose edges of the fissure. Fortunately, this patient was able to abstain from swallowing any food for five days, nourishing injections being exhibited two or three times daily. The ligatures were removed on the sixth day; by this time, the lower half of the fissure was well cicatrized—the upper portion also adhered, but between these there was a gap, about half an inch long and a quarter broad. The edges of this gap were touched every second or third day with nitrate of silver: they gradually became approximated, and, finally, were firmly agglutinated; but not until two months from the date of the operation. The deglutition and speech of this patient have become much more easy and distinct than they were formerly.—*Archives Générales.*

ON THE CURATIVE EFFECTS OF ABSTINENCE, AND OF A VERY RIGID DIET, IN CERTAIN DISEASES.

The Sangrado treatment has been several times tried and recommended in Italy, France, England, and Sweden, and now our German brethren have adopted it, and are extolling its salutiferous blessings. Rust assures us that he employs it extensively at the Charité Hospital at Berlin, with great good effects; and his disciple, M. Rolfs, has communicated the history of a case, the cure of which was altogether attributable to a "diète méthodique!" The case was one of spinal deformity, accompanied with paralysis of the lower limbs, and occurring in a lad 14 years of age. There was also caries of the ischium, and a fistula in the perineum. Confinement to the horizontal posture for a length of time, and the use of va-

rious remedies, had been tried, without any good effects. Issues had been kept open for several months; but notwithstanding their use, paraplegia had increased so much, that the patient could with difficulty lift either of his legs from the bed.

The "diète méthodique" was then commenced, and the young patient voluntarily submitted to its exactions with great fortitude. One ounce of food was withdrawn each day—no animal meat nor bread was allowed. In the course of three weeks, the whole quantity of food taken in 24 hours was only eight ounces of fresh vegetables, two small cups of milk, and half a pound of grapes. The pulse had fallen from 80 to 48 beats. After other six days, it was found that he had considerably more use of his limbs, and that not only could he raise them, but also that he could stand erect for a few minutes on his feet; nevertheless, they had become considerably emaciated. The hunger was now so ravenous, that he felt almost inclined to catch and devour the flies which settled on his clothes. From this period, the amelioration of all the symptoms was very rapid and striking, for not only could he walk about his chamber, but soon he was able to go out, and in the course of a few months he became an apprentice to a baker. The perineal fistula had quite healed.

Remarks. It is not stated what appearances the spine presented after the cure had been effected; but our readers will doubtless agree with us in believing, that there had, in all probability, never been any considerable disease of the bones, and that the paraplegia might be owing to a slight compression of the spinal cord, from the existence of a serous or other fluid within the vertebral canal. The rapidity of the cure is inconsistent with the presumption of any serious mischief of the osseous structure. One of the most important physiological effects, says M. R. of the "diète" is, that the patient draws a portion of his nourishment from his own flesh and blood, and thus the universal interstitial absorption goes on increas-

ing, just in proportion to the absorption from the surface of the intestines decreases. The superfluous blood is removed, the fat of the body is taken up, and every organ supplies its quota of nourishment to the support of the whole. Although a general emaciation is the consequence of all this, and, although the organs of digestion be comparatively inactive, and the circulation become languid, it is observed that the functions of the nervous system are not depressed in proportion, and that very often they even seem to be exalted. The diseases in which the "diète" is most useful, are threatened miscarriage, hæmorrhages, diarrhoea, and ephidrosis. It is also highly efficacious, we are told, in arresting seminal pollutions, especially if the patient, at the same time, engages in some serious pursuits during the day, and sleeps on a hard bed at night! Syphilis and many cutaneous diseases are often singularly benefited, and sometimes quite banished, by the penance of fasting. Gonorrhoea, too, may very generally be got rid of, in the course of one week, by restricting the patient to the use of mere barley water, and an occasional dose of the powder of cubebs. Some physicians have recommended that small doses of ipecacuan, or of tartar-emetic, be given frequently, with the view of exciting nausea, and thus suspending the desire for food; but Dr. R. assures us that this practice cannot supersede the one which he recommends; for that in order to be of service, the feeling of hunger must be experienced, and that it is this very feeling which is often so extraordinarily efficacious in curing disease, by the state of general excitement which it induces. In conclusion, adds our starving author, it is necessary to animate and support the courage of our patients by painting, in the most glowing colours, the hope of a speedy cure, and by appealing to their honour and fortitude to assist us in the noble object they, as well as ourselves, have in view!! —*Archives Générales.*

We have great doubts that the praises of the "diète méthodique" will ever be sung, or at least will ever be listened

to, with so warm an enthusiasm on this side of the Channel, as in Germany or France. It has the mighty disadvantage of being in direct antagonism (to use a new medical word) with all the inbred notion of our countrymen.—Rev.

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OPERATION OF PELVIOTOMY. By Dr. GALBIATI.

A rachitic female, about thirty years of age, was admitted into the Hospital of Incurables at Naples, pregnant with her first child, and near the end of her gestation. She was exceedingly deformed, very low in stature, and all the limbs, especially the lower ones, were bent into the most irregular shapes. On examination of the pelvis, it was found that the sacro-pubic diameter did not exceed one inch and a quarter. A consultation was held, to determine on the practice to be followed. Signor G. proposed the operation of pelviotomy, modified in the following respects from the original Sigaultian method: the two ossa pubis to be divided with strong curved scissors or nippers, at about three fingers' breadth from the symphysis; then the ossa ischii, at the posterior part, to be similarly divided; and, lastly, the symphysis pubis to be cut across and separated laterally. "By means of this quintuple section," we are told, "sufficient space may be obtained for the easy expulsion of a fœtus from a pelvis so deformed, that the Cæsarian operation would be deemed quite necessary."

The following are the steps of the operation, as performed by Sig. Galbiati. An incision was made through the soft parts over the right os pubis, and over the region of the posterior, or lower portion of the ischium; these bones were then divided across with pliers—a manœuvre not very easily done, but which, after some delay, was satisfactorily accomplished; a small intermuscular artery required a ligature; the pudic and obturator vessels were quite safe. The next step was to divide the symphysis pubis;—this being accomplished, Signor G. introduced the

thumb and fore-finger of his right hand into the vagina, ruptured the membranes of the fœtus, and discharged a large quantity of the inclosed waters. The operation had by this time lasted for an hour and a quarter; and as uterine pains began to come on, the wounds were dressed, and the patient put to bed, and a large opiate was administered. The patient experienced much pain during the night, and occasionally she was delirious. On the following day, the sacro-pubic diameter of the pelvis was found to have stretched at least a third of an inch since the operation; the os uteri had become dilated, and the head of the fœtus had advanced somewhat, squeezed like a wedge between the ossa pubis, and the vast protuberance of the sacrum.

The second day after the operation, it was a question among the surgeons, whether the section of the bones on the left side should now be performed; and it was urged in favour of this step, that sufficient space might be thereby obtained for the introduction of the forceps, and the mechanical extraction of the child, of whose death there were now well-grounded suspicions. The condition of the patient was, indeed, far from being favorable; nevertheless Sig. Galbiati resolved to complete the operation, as he had proposed at first. Having, therefore, cut across the rami of the pubis and ischium on the left side, as he had done the day before on the right, he then introduced the forceps, and extracted, but not without considerable difficulty, a well-formed male foetus, whose appearance indicated that life had ceased for about 24 hours. A belt was applied round the pelvis, and warm fomentations kept to the abdomen. On the morning after the second operation, the patient was found to be in a highly irritable and nervous state; the symptoms became gradually more alarming, the pulse fell, the body became cold, and the poor woman passed "a miglior vita" on the morning of the fourth day after the first operation, and thirty hours after the second.

Dissection. The three first wounds were in a sloughy gangrenous state, bedewed with sanies; the other two

wounds were dry. On dividing the abdominal parietes, all the viscera appeared healthy; the uterus and its appendages presented no morbid signs; when cut through its internal surface was, in every respect, such as might have been expected after a recent delivery. The sacro-iliac synchondroses were in a normal state; the ossa pubis and ischii on the right side were found to have been smoothly cut in their perimeters, or surfaces, and broken through rather irregularly in their substance; but none of the spicula or fragments had injured the surrounding soft parts; the bones on the left side had been more smoothly divided throughout.—The lowest lumbar vertebræ and the sacrum were greatly enlarged, and projected forwards, like a huge round mass, into the cavity of the pelvis, so that the conjugate diameter was exceedingly small.—*Giornale di Ghirurgia, Napoli.*

Such is a brief history of this remarkable case;—remarkable only for the unjustifiable and barbarous boldness of the medical attendants. Really, some of our continental brethren in Italy, and, we may add, in Germany also, seem to regard the body of a parturient woman as a block of wood, on which they may cut, and carve, and chisel, with the utmost coolness. The narrator of the preceding case seems to have been quite puzzled how to account for the death of the patient! He attributes it to “a nervous affection, the result of an imagination over-excited by all the circumstances which preceded and followed the operation!!” He speaks somewhat more like a rational being, when he advises that the operation be completed at once; and that it was highly reprehensible to allow two days to intervene, before the section of the pelvic bones of the left side was performed. But the operation, however modified, ought to be denounced as murder.—REV.

REMOVAL OF CALCULI FROM THE PERINEUM.

A young boy, admitted into the hospi-

tal at Naples, presented on examination a prominent swelling of the scrotum; several hard bodies, like calculi, were felt under the integuments. Professor de Horatiis made an incision over the part, and extracted three calculi, of the size of coffee-beans, and a quantity of gravelly matter—the wound speedily healed. It is to be observed, that this boy had previously suffered severe pains in the region of the kidneys; the calculi were therefore probably of renal origin, and being driven along by the current of the urine, had become impacted in the urethra, through the parietes of which they had forced their way.—*Ib.*

DISEASE OF THE CEREBELLUM.—CURIOUS DISTURBANCE OF THE MUSCULAR POWERS.

A middle-aged man was lately admitted into the Hôtel Dieu. The symptoms were feverishness, great debility, confusion of head, and inability to use his limbs, at least freely. There was no abdominal or pectoral distress. When he was put to bed, it was observed that the head was in a state of continual rotation, even when resting upon the pillow;—it was not bent forwards or backwards, but only rolled about from side to side: the muscles of the face were occasionally convulsed, but the mouth was not distorted, nor was the tongue drawn either to the right or left side, although constantly moving with a tremulous agitation. Both forearms exhibited a prolonged convulsive movement along their radial sides, so that the thumbs and forefingers were kept bent; the soles of the feet were turned inwards and upwards; the tendons of the tibiales antici muscles were very prominent, and permanently stiff. The patient seemed to have a complete control over the flexors and extensors of the head; when assisted, he could raise himself up and sit in bed. The movements of the thoracic and abdominal muscles were healthy. The voluntary movements of the extremities were very imperfect; he could not raise his left arm at all to his head, and his right

one only with considerable difficulty. The common sensibility was but little affected in any part; the intellect was confused; he could not answer many questions successively. In the course of a few days all the unfavourable symptoms were aggravated; the trembling oscillation of the head and tongue was incessant; the trunk and limbs lay nearly still and motionless; the forearms were laid across the abdomen, the wrists were bent, and the thumbs drawn into the hollow of the hand, and almost constantly trembling. Every now and then there was a paroxysm of apparently epileptic convulsions, and the patient seemed to recover his sensibility and consciousness for a time, but he soon relapsed into his former stupor. On dissection, the attention of the physician was directed in a special manner to the encephalic contents; and it was found that a tumor, of the size of a small walnut, had formed on the tuber annulare, and adhered to the outer surface of the cerebellum. This tumor was formed of nacreous particles and layers, and belonged to that class of morbid deposits described by M. Cruveilhier as consisting of stearine and cholesterine;—they appear to be quite inorganic, presenting no traces of vessels, or of cellular tissue.—*Archives Générales*.

HYPERTROPHY OF THE MUSCULAR COAT OF THE STOMACH.

This pathological phenomenon has hitherto been almost quite overlooked by anatomists. Neither Morgagni, Haller, nor Baillie allude to it. Meckel, in his Manual, states, in a general way, that in great eaters the muscular coat of the stomach is often thicker than is usual. M. Louis has indeed detailed two well-marked instances of this hypertrophy which he met with; in both, the pyloric orifice was affected with scirrhus; and he was thereby led to regard the former change as the result of the latter. A woman, 49 years of age, of a spare habit of body, had long suffered from mental anxiety, which she vainly endeavoured to subdue by immoderate

indulgence in the pleasures of the table;—in course of time the appetite became quite voracious. Her chief malady was a difficulty of breathing, which returned periodically every evening, and was accompanied with the sensation as if a heavy ball was rising from the lower part of the belly to the region of the heart, and there stopped, and obstructed the respiration. These symptoms lasted generally for about six or eight minutes, and then gradually subsided. Each attack became more severe; and at length they sometimes induced delirium. A general emaciation supervened, although the bulimia was not diminished. All the remedies tried to relieve her failed, and she died in the course of a few months from marasmus.

Autopsy. Thoracic organs healthy; omentum almost entirely wanting; liver, gall-bladder, and spleen natural. The stomach was puckered, and evidently much thickened, especially towards the pyloric orifice, and along the great curvature; its blood-vessels were empty; the mucous membrane, coated with a viscid deposit, was thin, transparent, but not softened; its surface was elevated into bold irregular projections, by the subjacent bundles of muscular fibres, extending from the great cul-de-sac towards the pylorus; between these projections were hollows, or depressions; and thus this stomach presented an appearance not unlike to that of the inner surface of the heart. The thickness of some of the muscular fasciculi was at least half an inch. The rest of the alimentary tube was normal.—*Hufeland's Journ. der. Pract. Heilk.*

INFLAMMATION OF THE MEMBRANES OF THE OVUM.

Madame ———, 18 years of age, in the fourth month of her first pregnancy, applied to Dr. Ollivier, in consequence of general indisposition, and of a reddish coloured discharge from the vagina.—The abdomen was not at first tender nor swollen, but severe pain was felt in the region of the kidneys. The movements of the child had not yet been

felt. The uterus could be felt distinctly with the hand placed on the hypogastrium; and if firm pressure was made, a sharp pain was produced. Gently soothing means and absolute rest were enjoined, and after a few days the patient seemed to be relieved, when suddenly the abdomen became enormously distended, and a fluctuation was distinctly perceptible. A sense of uneasiness and weight in the hypogastrium was complained of. Dr. O. was not at all surprised at this change in the symptoms, as he had, from the commencement, regarded the case as one of inflammation of the membranes of the ovum: and he therefore concluded, when the sudden swelling of the abdomen supervened, that the inflammatory process had terminated in effusion. The treatment which he adopted was of the simplest kind, as the general health of his patient was now moderately good. The coloured discharge became less and less, all tenderness of the abdomen ceased, and the movements of the child began to be felt. The pregnancy went on favourably to its full period, and the lady was safely delivered. Dr. O. was then able to verify the accuracy of his prognosis.

It may be noticed, that during the labour, and before the head was protruded externally, there had escaped suddenly a tumor or pouch as large as a man's fist, formed apparently by the foetal membranes, but of the thickness and consistence of softened parchment.—As labour advanced this pouch burst, and discharged the amniotic fluid.

On examination of the after-birth and membranes, he found that these last were, for about one-third of their extent, considerably thickened, opaque, and of a whitish colour, villous on their internal surface, and, in short, altogether like to parchment which had been long steeped in water. All the thickened portion was traversed by minute vessels, and these were more distinct as they approached the placenta.—*Arch. Gérales.*

CASE OF FATAL OPISTHOTONOS, TO WHICH ARE APPENDED SOME PHYSIOLOGICAL REMARKS.

Dr. Bellingeri, with whose work on the functions of the nervous system our readers are made acquainted in a preceding part of the present number, is the narrator of the case. A country girl, thirteen years of age, whose health had been very generally good, in spite of a considerable bronchocele, began about the middle of last year to experience a pain in the left shoulder, which extended towards the neck, and was especially severe over the larynx; the neck became stiff, and occasionally she complained of pain in the occiput, and difficulty in moving the lower jaw.—These symptoms she attributed to having slept in a damp chamber. Although troublesome, they did not seem to disturb her general health, as she eat and slept well, and was able to go about as usual. It deserves, however, to be noticed, that the act of swallowing was not quite easy;—she felt as if the food was partially obstructed in its descent. In the course of a day or two, she experienced sharp pains along the whole extent of the spine, and a sense of dragging in the lower extremities. Two days after, the lower extremities became rigidly drawn backwards; and in other 24 hours, the head, neck, and trunk were similarly affected. The sharp, darting pains in the occiput and along the spine were as severe as hitherto. Venesection and oily purgatives were employed, and leeches were applied to the back. For five days, the tetanic symptoms continued in all their severity; and so powerful was the opisthotonos, that the body of this poor sufferer formed a complete arch backwards. The rigidity of the spasm was strongest in the lower extremities;—so stiffly were they drawn backwards, that they could not be brought into a straight direction, even when considerable force was used. The power over the upper extremities was not completely lost, the patient being able to move them about in some directions; but the movements were limited and also painful. The pupils were observed to be con-

stantly contracted, and seemed to be little or not at all affected by light; the sense of vision and the hearing were not however disturbed. The *alæ nasi* and the upper lip were drawn upwards, and the patient could only imperfectly close the mouth: indeed every muscle of the face seemed to be more or less affected with spasm. In no part was the common sensibility affected. The pulse was contracted, and beat about 104 times in the minute. The abdomen was so stretched that its surface was as flat as a board; for four days no alvine evacuations had been obtained; and it was found that considerable spasm of the sphincter ani and of the rectum existed, when attempts were made to throw up enemata. The urine was voided voluntarily and at intervals; but she had not the power of retaining it; for whenever the desire came on, she was obliged to yield at once to it. The heat of the body was rather higher than in health; and the skin was always gently moist.

Dr. B. saw her for the first time on the ninth day after the commencement of the disease, and found the symptoms then as we have described. He tried the effects of bleeding from the jugular vein, in consequence of the patient complaining of a distressing constriction in the throat. After about nine ounces had flown, a sense of suffocation came on, and the face became livid; the bleeding was immediately stopped, and in the course of a few minutes the breathing became more easy; but again the paroxysm returned with more alarming severity, and the patient died, apparently asphyxiated, from a spasmodic closure of the *rima glottidis*. A short time after death the left arm was drawn backwards. For twelve hours the rigidity and distortion of the head, neck, trunk, and lower extremities continued, although the body was then quite cold; in other twelve hours these appearances had ceased, and the joints were pliant.

Dissection. On the posterior surface of the spinal cord, between the third dorsal and the first lumbar vertebræ, and externally to the investing *dura mater*, there was a bloody exudation;

it was truly an exudation and not a mere congestion. When the *dura mater* was slit open, a state of very high injection of the minute capillary vessels on the *pia mater*, which invests the posterior surface of the medulla, extending from opposite the ninth dorsal vertebræ to the extremity of the cord, or *cauda equina*, was most strikingly apparent to all the medical men who attended the examination. The *pia mater* which invested the posterior surface of the rest of the spinal marrow was similarly, but in a less degree injected; the injection was most conspicuous at the medulla oblongata. It is to be observed that the appearance now alluded to was limited to the posterior surface of the medulla; it was not seen on the lateral surfaces. On the anterior surface the cellular tissue which lies between the vertebræ and the *dura mater*, and this membrane itself were very highly injected, (even more so than on the posterior surface) along the whole extent of the spine. When the *dura mater* was slit open, the *arteria spinalis media* was found engorged with red blood, and many of its branches, especially at the lumbar region, were in a similar state. The injection which existed on the posterior surface of the medulla was confined to the *pia mater*: the substance of the medulla itself throughout was altogether natural.

Cranium. There was a slight sanguineous transudation between the *dura* and the *pia mater*; this latter membrane seemed highly injected at several parts; the *thalami optici*, *corpora striata*, and *corpora quadrigemina* were healthy; but the *choroid flexus* was much engorged. The *pia mater* which invests the cerebellum, *pons varoli*, and medulla oblongata was highly injected over its whole extent; but the substance of those parts themselves appeared to have not been affected.

Abdomen. Several portions of the intestinal tube were of an unusually deep red colour; a number of *lumbrici* were found within.

Physiological Considerations. As in the preceding case, the engorgement affected chiefly the *pia mater* which in-

vested the anterior surface of the tuber annulare, and the posterior surface of the spinal cord, we can at once understand why the spasm assumed the form of general opisthotonos, accompanied with trismus and dysphagia. The anterior surface of the tuber is formed by fibres issuing from the cerebellum; and when these fibres are irritated, they cause spasm of the extensors of the head and neck, trismus, and a spasmodic constriction of the fauces and pharynx. The rigidity of the arms, and the painful difficulty which the patient experienced in attempting to bend them, indicated a spasmodic irritation of the extensor muscles.

The opisthotonos of the trunk proceeded from the congested state of the posterior surface of the dorsal medulla spinalis; and the permanently rigid extension and retro-duction of the lower extremities were owing to the disease having extended to the lumbar portion of the medulla; and the reason of the cramps having been more violent in these than in the upper extremities, is no doubt to be sought for in the more highly congested state of the lumbar, than of the cervical portion. The phenomena of the case are quite in harmony, says Dr. Bellingeri, and indeed corroborate the doctrine, that the cerebellum and the posterior columns of the medulla spinalis preside over the extensor muscles of the body, and do not at all influence the flexors. The absence of any disturbance of the sensibility is to be attributed to the immunity of the substance of the medulla from disease. The history of the case shews that an irritation acting upon the white, or medullary substance, causes spasm, and does not affect the sense of touch; also, that the posterior column of the spinal cord, and the nerves which issue from it, are not to be considered as simply sensory organs, as Bell and Majendie suppose; indeed, the sensibility was little or not at all affected in this child.

Such are the speculations of M. Bellingeri. This is not the place, nor have we at present the disposition, to dispute them. We therefore let them pass for what they are—his opinions.—*Rev.*

Pathological Considerations. The vermination is probably to be regarded as the occasional cause which had excited the latent, or masked enteritic affection. Broussais has very justly remarked that diseases of the encephalon and of the spinal marrow are often sympathetically or secondarily induced, by inflammatory or irritative affections of the alimentary tube; the reverse of this position also is equally true. Admitting the correctness of the opinion, that the nervous was consecutive to the enteritic disease, we are led to account for the more marked congestion which was found at the tuber and medulla oblongata, to the more intimate sympathy, and the more immediate connexion which exists between those parts and the abdominal viscera, by means of the great sympathetic nerve. We can also understand how the morbid action may be propagated to the posterior surface of the spinal cord; no doubt in consequence of the numerous communications between this (the sympathetic) nerve, and the posterior fasciculi of the spinal nerves. From these considerations, it must be apparent, how necessary in medical practice it is to have our attention most diligently directed to the state of the *primæ viæ*, in all affections either of the brain or of the spinal cord.—*Annali Universali di Medicina.*

CANCEROUS ULCERATION OF THE NOSE TREATED WITH CREOSOTE.

A young man, 17 years of age, reported that about a year and a half before his application to M. Graefe, a pustule formed on the lower margin of the ala nasi; that he scratched it off with his nail, but that it speedily formed again, and extended, giving rise to an ulceration which eat away all the pinna, and part of the apex of the nose, and attacked also the lower lip; the ulcerated surface discharged an ichorous offensive matter. M. G. when he first saw this patient, discovered, upon looking into his mouth, that on the right side of the palate also there were seve-

ral small ulcers of a very unhealthy appearance. A variety of remedies had been tried by different surgeons; but the disease had baffled them all. M. G. considered the case as well adapted for a trial of the creosote; he touched the surfaces of the sores in the throat, as well as on the nose, with a pencil dipped in creosote water, and introduced into the right nostril a dossil of lint wet with it. The application caused a slight burning sensation. It was used once daily: on the fourth day, the surface of the ulcer on the lip was observed to be quite dry, and to be covered with a reddish-brown crust. Upon removing this, a few drops of blood flowed from the raw surface. The creosote water was, however, immediately re-applied—the crust was again formed within 24 hours, and again removed. This treatment was continued for four days, and, at that period, the appearance of the sores was decidedly much improved; the surface was no longer fungous, but dry, and, as it were, mummified; the lower margin of the ala nasi exhibited a point of cicatrization, and this sanative process advanced gradually during the ensuing fortnight. M. G. now applied the pure creosote, in place of its solution in water; the pain caused by the application was very smart and pungent; but it did not last long. On the morrow, the crusts were found to be more strongly adherent, and considerable difficulty was experienced in attempting to remove them. The application of the pure oil was continued regularly once a day; and so satisfactory was the progress made under its use, that, in the course of another fortnight, almost the whole extent of the ulcer on the nose and lip was cicatrized. A very small portion remained in a state of suppuration at the date of the report.—*Journal für die Chirurgie, &c.*

The English reader will scarcely fail to notice, that this was an instance of lupus. Various stimulating and escharotic ointments or washes have sometimes succeeded, and more often failed, in healing this obstinate species of ulceration.

ON THE EMPLOYMENT OF SOOT, AS A SUBSTITUTE FOR CREOSOTE.

M. Bland, physician to the Hospital de Baucaire, was led, by analogical reasoning, to believe that soot might probably have similar effects, as an outward application, to the newly-discovered substance, creosote. The preparation of this (creosote) is not only very expensive, but is extremely uncertain and troublesome; it is obtained by the dry distillation of organic substances. Now it may be observed, that the combustion of fuel (wood), in our grates, is an every-day rude exemplification of the same process; the former, indeed, goes on in closed vessels, and the product is, therefore, more simple and pure; but there can be little doubt that the same constituents are present in the heterogeneous soot of our chimneys. M. Bland communicates the results of his practice in the following reports.

CASE 1. A boy, 14 years of age, had been affected, for eight months, with the "herpes squamosus lichenoides" on the chin and lower lip. This darte presented the appearance of a large grey-coloured crust, hard, and very adherent to the skin, which was stretched, painful, and deeply chapped. The disease had resisted a variety of remedies. He was ordered to use a lotion (made by boiling two large handfuls of soot in a pint of water for half an hour, and then strained) four times a day. Within a fortnight, the cutaneous affection was cured, and the skin had recovered its natural colour and pliancy.

CASE 2. A younger brother of the former patient had, for a year and a half, laboured under a most troublesome "tinea favosa," or "favus vulgaris," which had spread over the whole of the hairy scalp. Thick, yellow, honeycomb crusts covered the diseased surface, and a most disgusting smell proceeded from it. He was ordered to have the hair cut close, and to apply bread and water poultices for a few days, in order that the crusts might be detached. When this was effected, the

soot wash was to be used frequently in the course of the day. On the fifteenth day after the commencement of this treatment, the disease was quite subdued. The application did not cause any pain.

CASE 3. A soldier, 22 years of age, had for two years been affected with an "eruption crouteuse" (impetiginous?) on the mucous membrane of the nostrils, which had obstinately resisted all the methods of treatment which had been tried. When admitted into the Hospital de Baucaire, on the 21st of last March, the nose was swollen, indurated, and painful on pressure—the upper lip also was swollen—the edges of the nostrils and the mucous membrane, for some extent inwards, were so covered with thick, yellow, honey-comb-like crusts, that the patient could with difficulty breathe through the passage. He was ordered to steam and bathe the parts frequently with the soot lotion, and in the intervals to apply an ointment, composed of an ounce of soot and an ounce of lard. By the fourth day of the following April, the cure was pronounced complete.

CASE 4. *Diphtherite.* A young soldier had been affected, for a fortnight, with numerous small and very painful ulcerations on the gums, and on the inside of the cheeks. The gums were soft, ulcerated, and fungous—they were covered with a grey-coloured, fetid, pseudo-membranous layer, which separated in irregular portions; the slightest pressure caused the gums to bleed. This patient was cured in the course of three days, by using as a gargle the decoction of soot.

CASE 5. *Cancerous Ulceration of the Breast.* A woman, 64 years of age, whose catamenia had already ceased for 15 years, applied to Dr. B. under the following circumstances. There was an ulcer four inches long by three in breadth, and about two in depth, occupying the right mamma; the margins of the sore were hard, knobby, irregular, and everted, of a pale red colour, and exhibiting here and there yel-

low-coloured points; the discharge was ichorous, and most abominably fetid: the pain which this patient experienced was excessive, and had deprived her of sound sleep for upwards of six months; her health had consequently suffered much, and she was evidently falling into a state of marasmus. She reported that, five years previously, she perceived a hard, moveable tumor, of the size of a walnut, in the substance of the right mamma—that this tumor gradually enlarged, so that, in the course of two years, it was as big as a hen's egg—that, at this period, she began to feel darting pains through it; these were at first slight and intermitting, but they became progressively more and more severe, and at length insufferably agonizing. The nipple was retracted so much as to be scarcely recognizable, and the surface of the mamma was covered with numerous varicose veins, which had occasionally burst, and discharged a quantity of blood. [It is not stated at what period the integuments had given way, and the ulceration had commenced.—REV.]

The soot lotion was ordered to be applied frequently, and, in the intervals, the sore to be dressed with an ointment, composed of two ounces of lard, two of soot, with two drachms of the extract of belladonna. The patient experienced a most soothing effect from this ointment. In eight days, the size of the ulcer had diminished by two-thirds; the edges had become soft, pliant, and depressed; the fœter of the discharge was corrected, and the surface was covered with numerous healthy granulations. In the course of another fortnight the cure was complete.

CASE 6.—*Cancer of the Uterus.* A woman, between 60 and 70 years of age, began, two years after the cessation of the catamenia (which took place in her 50th year), to experience a sensation of distressing weight in the genital organs; this was followed by a leucorrhœal discharge, not constant, but recurring at intervals. These symptoms continued unrelieved for several years, without materially affecting the general health; but gradually the sense

of weight increased, and it began to be accompanied with sharp lancinating pains within the vagina, and with difficulty in discharging the urine and fæces. When she applied to Dr. B. in December, 1833, the following is the report of her condition. Almost constant darting pains felt within the vagina, from which there was a bloody, fetid discharge—intolerable pain in the left groin (no swelling, nor even redness, was to be perceived there)—shooting to the left hip and thigh; the effort of relieving the bladder and rectum most painful, violent, and often quite ineffectual, so that the urine required to be drawn off, and emollient enemata to be given, for the purpose of soliciting the alvine evacuations—a sensation of icy coldness in the loins—utter want of sleep—anorexia—great debility, and general decay. Manual examination at once detected the existence of a large ulcer, occupying the cervix uteri, which felt hard, irregular, and tuberculated—the ulcer was nearly three inches in extent, with scirrhus, everted edges. The patient had consulted Professor Lallemand, of Montpellier, who had advised anodyne injections, and the free use of conium, opium, aconite, and other medicines of the same class; but the relief thus obtained was very small.

Dr. B. ordered the frequent use of the soot lotion, as an injection, on the 11th of March. By the 18th, the characters of the ulcer were decidedly improved, and he then recommended the ointment (as in the last case) to be applied in the intervals. Considerable difficulty was experienced in employing these remedies: with the view, therefore, of assisting their operation, he endeavoured to fumigate the elevated surface with the steam of a strong decoction of soot, introduced by means of a funnel, having a curved pipe. On the 22d of the month, the progress already made was most satisfactory; the edges of the sore had lost much of their hardness and inequality—the tumefaction had considerably subsided, and the fissures or rhagades had disappeared—the pain also was greatly abated; the patient was able to void the urine and fæces with much less difficulty, and she had

obtained more quiet sleep than for a long time previously. On the 10th of April, the ulceration was quite healed; the uterus had shrunk so much, that it was not easy to reach it with the finger, but, when it could be felt, it gave the impression of a hard and scirrhus mass. The finger, when withdrawn, was not covered with the ichorous discharge, as hitherto. M. Bland saw his patient a month after this date, and he then satisfied himself, by a most careful examination, that the part of the uterus accessible to the finger had lost much of its induration and diseased feel, and had recovered its normal consistence and pliancy—the cervix uteri had been almost quite destroyed by the ulceration, and even part of the “bas fond” of the womb; of this M. B. was made sensible by the remarkable depression, or groove, formed at the lower part of the cicatrix. This cicatrix felt to the finger like a round bag, closed by a piece of cord.

CASE 7—is that of a middle-aged man, who was affected with an obstinate “herpes præputii.” The glans and inside of the prepuce were covered with numerous pustules, from which oozed out a fluid, which thickened into soft yellowish crusts; the itching was intolerable, so as to deprive the patient of sleep. The disease was quite cured, in five days, under the use of the soot lotion.

CASE 8.—*Herpes Squamosus Lichenoides*. A woman, aged 49, had for 12 years been suffering from a dartre, which formed a crust, from four to six lines in thickness, on the upper part of the left cheek, and on the left side of the nose; the surface was deeply chapped, and from the fissures there escaped a sero-purulent matter: the itching was exceedingly distressing, and when the patient rubbed the crust off, the skin underneath was found to be red, granulated, and dotted with numerous yellow points, from which the discharge began to ooze out: the edges were surrounded with an areola of a bright red colour, and the lower eyelid was everted and dragged so much inwards, as

to expose its inner surface, in consequence of the tension of the skin. The crusts were first softened with bread and water poultices, and when they were detached, the use of the soot lotion and ointment was commenced. In between three and four weeks, the dartre on the cheeks was almost completely cured, only one long chap remaining—that on the nose, however, was not much changed. In other three weeks, the only trace of the dartre on the cheek was the formation of a thin, yellowish pellicle, not rising above the level of the skin, and adherent to the surface of the cicatrix; the dartre on the nose was diminished in extent, but its surface was still granulated, and of a yellow colour. Ten days after this date, the report states that the cheek was now, to every appearance, quite sound, and that the disease on the nose was advancing most rapidly to a healthy cicatrization.

CASE 9.—*Herpes Squamosus Scabioïdes*, of 40 Years' Standing. P. B. aged 60, of an apparently sound constitution, and who had enjoyed exceeding good health on the whole, had for the last 40 years been annoyed with a large, dry, squamous dartre over the whole of the front of both legs, from an inch below the knees to the neighbourhood of the ankles. It was attended with a most troublesome itching, and had resisted most obstinately every plan of treatment. On the 10th of May of the present year, he applied to M. Bland, who ordered him to take a tepid bath or two, for the purpose of softening and separating the scales, and then to rub all the affected parts with the soot ointment. On the 16th, only a few isolated pustules were to be seen over the larger surface which the dartre occupied; in the intervals between these, the skin was of a faint red colour, and was beginning to assume a healthy aspect.

[The progress of this case is not related.]

The other successful cases recorded by M. Bland need not specific allusions, as they are analogous to some already quoted. It may be mentioned that he

has derived most pleasing effects from his remedies in pruritus genitalium, and in genuine psora, or scabies. Afraid, no doubt, of the incredulity of his brethren, our author has done well to acknowledge, that he has failed to obtain any curative results in some cases; as, for example, in one of cancerous ulceration of the nose—in one of cancer of the mamma (although, in this case, the soot lotions had the effect of stopping the discharge, and causing the surface of the sore to become dry)—and, lastly, in a chronic ulcer situated on the back of the left hand; the supuration was, indeed, quickly dried up, but the fore-arm thereupon began to swell, and to become painful and inflamed; these symptoms were at once relieved by omitting the use of the lotion, and by the consequent recurrence of the discharge.—*Révue Médicale*.

The preceding memoir we have given at considerable length, as the author's character stands honorably with the profession. We fear that his success has been too great. How much it is to be regretted that the nomenclature of cutaneous diseases adopted in France is so unmeaning.—REV.

OPHTHALMIA TREATED WITH LOTIONS OF CORROSIVE SUBLIMATE.

M. Bally, in a paper published by him a few years ago, in the *Gazette de Santé*, strongly recommended the employment of a solution of the oxymuriate of mercury in ophthalmia, whether of an acute or of a cronic character. The following two cases are adduced, as confirmatory of its good effects.

A woman was seized, after exposure to alternate heat and cold, with a violent inflammation of the conjunctiva of the left eye. The organ was exceedingly painful, and could not tolerate the impression of light—she felt as if sand had got in between the lids and eyeball, and the tears were hot and burning. The disease had lasted six days, when this patient consulted M. B. who ordered her to bathe the eye, a do-

zen times at least in the course of the day, with a collyrium, composed of four grains of the sublimate and four ounces of water. In the course of three days, the inflammation had almost entirely disappeared, and by the sixth the woman was pronounced cured.

In the second case, the ophthalmia had continued for eight weeks before the patient consulted M. B. He had been repeatedly leeches, blistered, and also well physicked, but without much benefit. Both eyes were inflamed; and on the cornea of the right one there was a nebulous spot, of the size of a millet seed;—this eye was more painful than the other, and the sight was more imperfect. M. B. immediately ordered the use of the sublimate collyrium, and a blister on the nape of the neck. No change was made at any time in the treatment; by the 13th day, all inflammation had disappeared from both eyes; the speck however remained; but, fortunately, this also vanished under the application of the “pommade de Janin,” and the vision was completely restored. The author adds, that he could cite at least twenty other cases of ophthalmia, treated successfully by the same plan.—*Revue Médicale*.

USE OF CHLORURET OF LIME IN BLENORRAGIA.

M. Graefe, of Berlin, was among the first to employ this remedy in inflammatory discharges from the urethra; and so favourably did he augur of its good effects, as to state that it would cure the disease when copaiba and cubebs had failed. It was used both internally, either in the form of mixture or of pills, and externally as an injection: the formula for the pills is as follows:—Take of the chloruret one drachm, of extract of opium nine grains, and as much gum as may be necessary to form a consistent mass, which is then to be divided into 54 pills. At first, one may be taken every two or three hours; and the dose is to be gradually increased till eight, ten, or twelve are taken every hour. The injection is made by

dissolving 24 grains of the chloruret in six ounces of water, and adding half a drachm of the vinum opii. The strength must be regulated according to the irritability of the canal. This treatment has been successfully adopted in acute as well as in chronic cases; but it is in the latter set chiefly that the greatest benefit has been obtained. As a matter of course, if the irritation produced exceed certain limits, we must omit the use of the chlorurets, and resort to a more soothing treatment. In one patient, who had had a gleet for two years, the discharge was stopped in the course of ten days.—*Trav. de la Soc. Med. de Bourdeaux*.

Our continental brethren discover so many successful remedies, that we wonder how any incurable or obstinate diseases remain. The chloruret of lime may vanquish gonorrhœa in the practice of M. Graefe, but we regret to say, that the English malady refuses to submit to its potent influence. In other words, we have seen it tried for female and for male discharges. It is rather better in the form of an injection, than mere cold water.—REV.

OBSERVATIONS ON THE SECTION OF THE TENDO-ACHILLIS IN CASES OF CLUB FOOT.

M. Stromeyer, surgeon to the King of Hanover, has the merit of having first experimentally proved, that the division of the tendo-achillis is often by far the most efficacious mode of treating this deformity.

Several cases have occurred to him, in which it has been performed since the date of his last report; and the following contains the substance of a communication from him to the Archives Générales, in the month of June. H. Leging, a boy seven years old, had been affected with club-foot in both extremities since birth. By the uninterrupted use of appropriate bandages, the deformity had been somewhat corrected, especially in the left limb.—When brought to M. S. the edge of the right foot was found to be strongly

turned inwards, the point of the foot directed downwards, and the limb throughout to be considerably emaciated. When he walked, he rested upon the fibular edge of the foot, and his gait was consequently difficult and ungraceful. The voluntary movements of the foot were very imperfect and constrained; but the member was readily brought into a correct position by very gentle traction. The circumstances of the boy's parents being unfavourable to the tedious treatment of such an affection by means of splints, &c. applied for a length of time, M. Stromeger recommended that the tendo-achillis should be divided, for the purpose of equalizing the action of the flexor and of the extensor muscles, between which two sets of muscles the normal antagonism had never duly existed.

The operation was performed on the 26th August, 1832; in five days the outward wound had cicatrized, but the extension of the limb was deferred for other three days, as the cicatrix remained somewhat tender. The foot was then easily brought into the proper position, and there retained, by "une extension croissante," for three weeks—the angle which it formed with the leg was about 70°. The apparatus being then removed, M. S. found that the substance intervening between the cut ends of the tendon was shorter than he had expected; it was not more than a quarter of an inch long, and was much thinner than the tendon itself. The foot, for a few hours, was retained in a correct position; but then it was gradually drawn into the former faulty direction, notwithstanding the use of a shoe, provided with a steel rod on the outer side. The condition of the boy was therefore not at all mended; and M. S. was anxious to repeat the operation; but to this the parents of the child would not accede.

The failure in this case is to be attributed to the delay of commencing the extension of the limb. By the eighth day, the adhesion between the two cut ends of the tendon had acquired too much strength.

Case 2. H. Linse, 13 years of age,

has laboured under club-foot, on the left side, for nine years. No satisfactory cause could be assigned for its occurrence. No treatment had been followed in this case, and the condition of the boy was gradually becoming worse. In August, 1833, he was taken to M. Stromeger for advice. At this time, the act of walking was so difficult and painful, in consequence of the tender state of the outer edge of the foot, on which all the pressure was made, that he seldom ventured out. The toes, and more especially the big one, were drawn strongly inwards, the tendon of the flexor longus pollicis being in a state of constant and powerful tension. It required, therefore, considerable force to bring the foot into a straight direction.

M. S. deemed it expedient to divide the tendon of the flexor pollicis in the first place;—this he did by introducing the point of a knife behind the tendon on the inner edge of the foot, midway between the heel and the great toe. The limb was allowed to remain quiet for three days; and it was then fixed in an apparatus fitted to keep up a constant extension. In the course of a week, there was a very decided improvement in the direction of the point of the foot; and now the section of the tendo-achillis was performed. A splint and bandages were applied. The outer wound was healed by the fifth day, and extension was then commenced. In ten days, the foot formed with the leg an angle of 70°. The apparatus was not removed till the end of the fourth week after the operation; and then the boot, which Dr. S. recommends, was substituted, and a continued extension ordered to be kept up during the night. The young patient began to walk with great ease, and was permitted to go out for a short time on the third day, after the removal of the apparatus. The cure was progressive, and eventually complete.

Case 3. Ferdinand West, nine years of age, had club-foot of the right side at birth. By constant attention, the condition of the little patient had been prevented from becoming worse. When

five years old he was taken to Dr. Stromeyer, who recommended the use of a peculiar apparatus, by means of which the foot was brought into and retained in a straight position. The use of this was continued for five months; and after that time, Dr. S. lost sight of the boy for the next four years. When again brought to him for advice, he found that the state of the foot was nearly the same as when he had last seen him, and the walking was even more difficult, in consequence of the pain which it occasioned. The *dorsum pedis* formed quite a convex arch, the toes being pointed down, and drawn in towards the heel, with the exception of the big toe, which was drawn upwards. The division of the tendo-achillis was performed on the 10th of January; the wound being healed in five days, the extension was commenced, and continued uninterruptedly for four weeks; the boot was then substituted, and the child permitted to walk. The facility with which he did this was most satisfactory. As the point of the foot was, however, still drawn inwards by the action of the *flexor longus pollicis*, Dr. S. divided the tendon of this muscle, and three days afterwards the tendon of the *extensor pollicis*: the foot was replaced in the apparatus, and the great toe forcibly drawn forwards. In a week after this operation, the patient was allowed to use the boot. The section of the tendons of the chief muscles of the great toe, so far from paralysing its movements, had caused them to be more easy and free of execution; and the limb gradually acquired greater strength than it had before.

Case 4. Mademoiselle B., 19 years of age, had laboured under scrofulous disease in her early years, and had at one time lost the use of both her limbs. This paralysis had gradually ceased, but had left behind great weakness of the right extremity, the foot of which became contracted. The expedients which had been resorted to for the cure of this deformity had failed. When she consulted Dr. S. he found that the *dorsum pedis* was much arched

downwards, so as almost to obliterate the hollow of the instep; the inversion of the foot was not considerable. The point d'appui in walking was the outer edge of the metatarsal bone of the little toe. The heel of the boot which she wore required to be between four and five inches high. It was not easy to bring the foot into a correct position, even when considerable force was used. The tendo-achillis was divided on the 11th of March; on the 16th the continued extension was commenced.—Three weeks after the operation, the foot formed with the leg an angle of 70°. The apparatus was then exchanged for a boot, provided with a steel rod on the inside; and the young lady began to take gentle exercise. The act of walking was at first extremely difficult and painful, but by degrees became more easy and perfect; and at the date of the report, she had gained almost completely the healthy use of the limb.—*Archives Generales.*

We give this memoir as we find it. We do not pledge ourselves to the opinions expressed by the authors in these foreign articles. Absence of criticism must not be considered as actual assent.

CASE OF SPONTANEOUS DRY GANGRENE, CURED BY BLEEDING.

A countryman, 40 years of age, admitted into the Hotel Dieu, presented in the hands and feet that rare variety of gangrene which some authors have denominated "white gangrene." The fingers were pale and of an icy coldness; the second and third phalanges were wasted, and, as it were, mammified; the form of each finger was conical or fusiform; the nails were puffed out and had a chalky appearance; the skin round their bases was slightly ulcerated. The last phalanges were completely insensible; in the others, the patient felt a sense of formication and extreme cold; he had no power of moving the fingers; the skin was white and dry like parchment, and emitted no gangrenous smell. The appearance of the feet was nearly similar to that of

the fingers; presenting the same icy coldness, the loss of all voluntary motion, and the absence of pain. The ears, nose, and lips of this man exhibited a remarkable deficiency of their usual warmth and colour. The action of the heart was vigorous, but rather irregular. The other functions of the body were in a normal condition: the patient said that he felt very well inwardly, and that his only reason for coming to Paris for advice was, that he had been unable to use his hands at any work for the preceding four months. The previous history of the case, as far as it could be well gathered from the patient's account of himself, was as follows.

The disease had commenced four years ago, but had varied a good deal in intensity at different times, according, to the season of the year; alternately abating and increasing. It was generally worse during the heats of Summer, especially when the patient was exposed to the direct action of the sun. During the first years, this species of glacial torpor, or asphyxia, did not last beyond a few days; the fingers however did not regain at any time their natural warmth and flexibility.

No satisfactory cause could be assigned for this singular disease. Rigid enquiries were made respecting his food, but nothing satisfactory could be ascertained to account for it. His occupation had been that of a thrasher of corn. His general health had been, as already stated, perfectly good.

M. Dupuytren, regarding the disease as an inflammatory affection of the arterial capillaries, akin in its nature to what takes place in the gangrena senilis, resorted to the same mode of treatment, which he has been in the habit for many years past of employing so successfully in the latter species. The patient was bled from the arm, poultices were applied to the parts, and a moderate diet enjoined. In the course of eight days, the heat, colour, motility, and sensibility of the hands and feet were restored, as if "par enchantement." The patient was advised to have recourse to the same treatment, if the disease should ever return—*Revue Med.*

HYDRO-BRONCHOCELE OR HYDROCELE OF THE NECK.

A man 50 years of age, entered the Hôtel Dieu, for the purpose of having a tumor, which impeded his breathing, removed from the front of the neck. It was of the size of an orange, situated between the os hyoides and the thyroid cartilage; the superjacent skin was healthy; a distinct fluctuation might be perceived. A finger, passed deep into the mouth, could feel the base of the tumor, behind the tongue. The breathing was sometimes so obstructed, that he was in constant dread of being suffocated; and his speech was so affected that he could only with great difficulty pronounce any long word.—M. Dupuytren plunged a bistoury into the most projecting point of the tumor, and discharged a large quantity of a thick, yellowish-coloured fluid; the incision was enlarged to the extent of an inch and a half, and when the cyst was well emptied of its contents, some lint spread with simple ointment was introduced into its cavity, with the view of inducing a certain degree of inflammation, in the hopes of obliterating it altogether. The progress of this case was quite satisfactory, and the patient was relieved of an annoyance which had afflicted him for a great number of years, and which of late had seriously affected his health.

Reflections. Hydrocele of the neck, of which the preceding case furnishes a good example, has often been stupidly confounded with some varieties of genuine bronchocele. Foderé has fallen into this mistake in his treatise on the goitre. It is quite true indeed that the thyroid gland becomes sometimes degenerated into a morbid structure, made up partly of cysts, which are filled with fluid; but such cases are quite distinct from the disease, to which the term "hydrocele of the neck" has been, and ought to be, applied.

The latter disease is a simple encysted watery tumor, and may very generally be cured in the manner above described; whereas the encysted bronchocele is a much more intractable disease, in con-

sequence, no doubt, of the other morbid structures which are co-existent.

The only danger attending the incision of, and attempts to obliterate encysted tumors of the neck, arises from the hazard of the inflammation excited in the sac being propagated to the air-passages.

The author who first accurately discriminated and described this disease is M. Maunoir of Geneva. He pointed out the analogy between hydrocele of the tunica vaginalis of the testicle, and the watery encysted tumors in the neck. He tried the effects of injecting stimulating fluids into the sac, after the withdrawal of its contents; at first he reported favourably of his trials, but he has since changed his opinion, and he now positively denounces the practice as generally inefficient, and sometimes highly dangerous: in one case, dreadful pains, convulsions, trismus, and diffused abscesses were the results of the experiment, and the desired object was not attained; for the disease returned after these alarming symptoms had been subdued. He does not approve of Dupuytren's method, but recommends that, in all cases, the seton is to be preferred, assuring us that its use has been eminently successful in his practice. Six or eight weeks are generally sufficient for the cure.—*Revue Médicale*.



PARALYSIS INDUCED BY THE PREPARATIONS OF LEAD.

In every one of 17 cases of this disease, observed by M. Tanquerel, the paralysis affected the upper extremities—in five only were the lower limbs affected at the same time; in five, aphonia, or some impediment of speech was present; and, in one, the intercostal muscles, the pectoralis major, and sternomastoideus appeared to have lost their contractility. Although, generally, the paralysis is limited to the muscular system, without disturbing the sensibility of the parts, yet cases sometimes occur, in which this latter function is injured simultaneously; it may be ei-

ther exalted, impaired, or altogether abolished. The first of these morbid conditions is the most common.

The muscles most frequently affected are the extensors of the fingers, the supinators, and the adductors and abductors of the thumbs. When the lower limbs are the seat of the paralysis, there is almost always some affection of the upper ones at the same time. As stated above, the tongue may become completely or partially paralyzed, and the patient will then stammer, or even lose all power of articulate speech; or the muscles of the larynx may be affected, and the voice be quite lost. The paralytic symptoms induced by lead generally come on very gradually, and almost imperceptibly, as the colicky symptoms abate and disappear; at other times, the colic and paralysis are simultaneous in their attack, and the former may be relieved, while the latter seems to be not at all affected; and, lastly, the paralysis has been known to supervene suddenly, during the severity of a colic attack, banishing it, and assuming, as it were, its place in the system; but this is a rare occurrence. One practically important fact has been often overlooked by authors, namely, that the saturnine paralysis may be induced, without having been preceded, or without being accompanied, by any affection of the intestines. Its duration varies from a few days to several years. As a general remark, it is worthy of notice, that most cases of lead palsy are, at least in their early stages, susceptible of cure.

The remedies which have been most approved by experienced men, are electricity, sulphureous baths, and the internal and external use of the nux vomica. M. Rayer, the distinguished physician of the La Charité Hospital, has been eminently successful in the treatment of this disease; he employs the strychnine, first internally, and then in the endermic method, conjoining the daily use of sulphur baths, or fumigations. The pathology of lead palsy is not at all known. "Would to God" (exclaims a French reviewer of the Hippocratic school) that many other

diseases, so well known in an anatomical point of view, were as easily cured." —*Essai sur la Paralysie de Plomb. Paris, 1834.*

LITERARY CURIOSITIES.

An ingenious contributor to our valued contemporary, the *Revue Medicale*, has endeavoured to lay down and illustrate certain rules or maxims to be followed by those who are much engaged in mental occupations. Among other topics which he has introduced, he alludes to the very different habits of different authors, when occupied in composition. Montaigne shut himself up in an old tower "pour y digerer librement à loisir ses pensées." Rousseau herborized; it was, he used to say, "en se meublant la tete de foin," that he could think most profoundly. Montesquieu composed the groundwork of the "Esprit des Lois," while reclining in a post-chaise. Milton generally composed at night, sitting in his arm-chair, with his head resting on the back of it. Bossuet sat in a cold room, but kept his head warm with a quantity of coverings. Mr. Fox, after having indulged to excess in the pleasures of the table, would often, when he went home, retire to his study, and wrapping a cloth dipped in vinegar and cold water round his temples, sit engaged in study for ten hours successively. On the other hand, we are told that Schiller wrote most of his best pieces when he had his feet immersed in ice-cold water. Maturin the author of *Bertram*, Melmoth, &c. withdrew into the most retired privacy when engaged in composition; when the inspiration seized him he used to place a wafer between his eyebrows, to announce to his servants that they were not to disturb him. Jeremy Bentham was in the habit of writing all his ideas on small scraps of paper, and then stringing these together, so that they resembled rather a huge file of a merchant's bills, than the manuscript of an author's work. Napoleon, we are told by Bourrienne, when engaged in deep thought, would often be humming or singing a tune all

the time, or notching the arm of his chair with the "air d'un grand enfant;" then suddenly he would start up, and point out the design of a monument to be built, or explain some of those mighty projects which used to astonish and terror-strike the world. These from out an almost infinite number of examples, sufficiently prove how different in different men are the circumstances favourable to mental labour; no general rule can be laid down, and the only advice to be suggested is, that each must work according to his fancy, habits, and ease.

What has been said of literary composers holds equally true of their musical brethren. Some, as Sarti, &c. can compose only in silence and gloom. Cimarosa delighted in noise and brilliancy. Sacchi found relief, and almost assistance to his ideas, if several kittens were playing in the room beside him; and Paesiello, in his fits of composition, used to bury himself under the bed-clothes, trying to banish from his memory all the rules and precepts of his art, and giving vent to his feelings in the exclamation "Holy Mother, grant me the grace to make me forget that I am a musician."!!

It is an observation as old as the hills, that great and enduring works can be achieved only by patience and tedious thought. Perfection in any accomplishment, said Girodet, "ne s'improvise jamais." And Antoine de la Salle used to remark of any one commencing a work of importance, "celui n'est que l'ecolier de celui qui le finit." Even Voltaire, who perhaps of all authors had the greatest facility of rapid composition was well aware of the requisite labour which must be spent in frequently revising his work; writing to M. Dargental on the occasion of a tragedy which he had very quickly composed, he wittily says, "Ma tragedie est finie; mais vous sentez bien qu'elle n'est pas faite. Mon ours de six jours demande six mois à etre leché."

But the tedious labour of long-continued and of often-repeated thought, is by no means the attribute of the authors of the present times: men of science, as well as men of literature, are

in a mighty haste after fame and glory, and there is many an "esprit gene-reux," who, like Champollion, is feeding himself with the hope of leaving "sa carte de visite chez la posterité." Our ingenious cotemporary concludes his amusing paper with some sensible remarks on what may be termed the "adjuvantia" of mental labour; having alluded to the advantages of an airy, cool, and quiet study, he then, en passant, suggests the propriety of wearing large, wide, and convenient articles of dress (every one knows "les Regrets à ma vieille Robe de Chambre," one of Diderot's best pieces), and points out the injurious effects of stooping too much, or for a great length of time, at a low table, when engaged in writing. It is well (says he) to rise from the table frequently to walk about the room, read aloud, and occasionally to vary the subject of meditation by one of a less grave character. These precepts, although seemingly trifling, are not so in reality. "An atom makes a shadow," was an observation of Pythagoras; and there is as much physiological as mere physical truth in the observation; the slightest organic lesion, the smallest injury, the least perceptible disturbance of health, may become, if neglected, the parent of much serious mischief.—*Revue Médicale*.

CHEMICAL EXAMINATIONS OF SPOTS, CAUSED BY BLOOD AND SEMEN, ON LINEN.

A charge of attempted rape on the body of a young girl, 11 years of age, was lately preferred against a man at Paris, and M. Chevalier was applied to, for the purpose of ascertaining, if possible, the nature of certain spots which had been found on the chemise of this child. The following is an account of his researches.

1. *Spots caused by a Bloody Fluid.* The linen so stained was cautiously immersed under the surface of distilled water: in the course of a few minutes, a brownish cloud began to separate

from the linen, and was gradually precipitated to the bottom of the vessel, in long reddish streaks. By the end of an hour, the water had acquired an uniformly reddish-brown colour—it restored the colour of paper which had been reddened by an acid; but this property seemed to be quite independent of the admixture of any fluid, and was no doubt caused by the alkaline impregnation which all linen receives when dressed. Heated to 100° C. in a glass tube, the discoloured water became more cloudy, and yielded a reddish-grey coagulum, which, on the addition of a few drops of caustic alkali, was re-dissolved, leaving the fluid of a greenish hue by reflected light, and of a reddish-brown by a refracted. An infusion of gall-nuts caused a reddish-grey precipitate.

2. *Spots produced by the fæculent Discharges.* The linen was treated with water, in the same manner as in the preceding case. The water speedily acquired a yellowish colour, and the characteristic smell. The alkaline property was again noticed, and arose, no doubt, from the cause which we adverted to. The filtered solution gave a precipitate with infusion of galls; evaporated in a glass dish, an excrementitious odour was emitted, and an albuminous coagulum furnished: this was mixed with a greenish-yellow matter, slightly acid and "sucrée," analogous in taste to picromel.

3. *Spots produced by an Animal Mucus.* Linen stained with seminal fluid, when immersed under the surface of water, did not, as in the preceding cases, induce any disturbance of its transparency; it (the linen) became slippery and viscid when moistened; the water yielded a few flocculi on the addition of nitric acid—when evaporated, it gave no coagulum, and emitted a peculiar faint smell, somewhat like that of fresh semen. Now the stains on the linen of the girl gave rise to appearances which did not agree with those now mentioned; the water with which it was treated became troubled and cloudy, and a flocculent precipitate

was formed at the bottom of the vessel; the linen, when moistened, did not become viscid to the finger; the precipitate caused by the addition of nitric acid was much more copious than had been the case with the sperm-stained linen, and the liquid, when evaporated, became coagulated, and gave out an odour of animal gelatine. These negative proofs were made more satisfactory, by comparing the results with those obtained from linen stained with a leucorrhœal discharge; the same precipitation by nitric acid, the coagulation by heat, and the giving out of an odour of animal gelatine.

The conclusions which M. Chevalier arrived at were—

1. That the red stains on the chemise of the girl had been caused by blood.
2. That the alkalinity of the water in which the linen had been immersed was of accidental occurrence, as other linen, free from all stains, produced the same phenomena.
3. That the yellow spots on the chemise had been caused by the fæcal discharge.
4. That the other stains had been caused by the vaginal mucus, and not by seminal fluid.—*Journal de Chimie*.

ANALYTIC EPITOME OF THE SECOND AND THIRD SECTIONS OF M. J. B. CAYOL'S *TRAITE' DES MALADIES CANCEREUSES*. Paris 1833.

Cayol, in the second and third grand divisions of his Treatise on Cancerous Diseases, a materially improved edition of which is now before us, passes in review the therapœia and empirical nostrums, whether external or internal, which have obtained notoriety in France, Germany, and Great Britain.

In this article, it is intended to notice the most important of M. J. B. Cayol's remarks, particularly in reference to his unwearied research, and success in imparting a knowledge of the ingredients of the recipes of Dubois, Bayle, Plenck, Storck, Lambergen, Gerbier, and Gamet, &c. With the

only other prefatory remark which we deem it necessary to make, that a leading object with us is brevity, we proceed at once to the—

FIRST CHAPTER.

External Remedies.

Arsenical Preparations. Of these, the white arsenic of commerce is unquestionably the most efficacious. It does not cure the disease, but acts on the degenerated parts, which it destroys by its energy, as an escharotic. It was first used by Fusch, in 1594. His formula was composed of white arsenic, chimney soot, and great serpentary root. Its application to ulcerated surfaces was occasionally followed by fever, accompanied with rigors, vomitings, fainting fits, requiring the renoucement of the remedy.

Rousselot's and Frère Come's Powders. The merit of these powders consisted in different substances being combined with the arsenious acid, by which its deleterious effects on the system were obviated, without impairing its action as an escharotic. Rousselot's powder was composed of *dragon's blood and cinnabar, of each two ounces—white arsenic, two grains. The whole mixed, and thoroughly pulverized.*

Frère Come made use of similar ingredients in different proportions, adding to the melange grs. xvij. of the powder of "Savatte brûlée."

Professor Dubois for many years made use of this formula—

Dragon's blood, ʒj.

Cinnabar, ʒss.

Arsenious Acid, ʒss.

Reduce the whole to powder, and mix thoroughly.

When about to use the above, Dubois added saliva, in sufficient quantity to form a paste, with which the crusts and excrescences on the surface of the ulcer were smeared: and above this he uniformly applied a stratum of arsenical paste, about two lines in thickness, which he covered with cobwebs (*toile d'araignée*.) The eschar separated

about the twelfth or fourteenth day. The same remedy was advantageously employed upon the wound resulting from an extirpated *cancerous* tumor, when the disease threatened to repululate.

In the middle of the seventeenth century, the famous powder of Pierre Alliot made a great noise: from the testimony of — Vacher and others, it was a preparation of arsenic, no way superior to the arsenical paste. The same may be said of the solution of arsenic, used in England by William Shearly as an escharotic.

Preparations of Lead. To discuss scirrhus engorgements, and even cure ulcerated cancers, saturnine extract, and other preparations of lead, were much praised by Goulard, physician in Montpellier, and many English and German practitioners.

Marvellous properties were attributed by Brambilla to a plaster, composed of red oxide of lead, olive oil, and turnip juice. Lead, however, in Cayol's opinion, can be regarded only as an admirable sedative; for, says he, "the observations of these physicians prove that they gave the name *scirrhus*, to engorgements not of a cancerous nature."

A preparation frequently employed by Bayle with advantage is this—

Golden litharge,
Vinegar of each, 3vj.
Good Olive oil, ʒij.

The litharge triturated in a porcelain vessel, adding the vinegar gradually; next the oil, drop by drop, "continuing the trituration until the mixture has acquired the consistence of half-congealed oil. He spread this liniment over the whole surface of the ulcer by means of a pencil, or with the brush of a quill. By the addition of a sufficient quantity of virgin wax, it may be converted into an ointment. The remedy is particularly advantageous to lull the pains of cutaneous cancer." Vegetable water is likewise employed with the same view.

Preparations of Iron. Mr. R. Carmichael, of Dublin, in 1806, published

an essay *On the Properties of Carbonate of Iron*, applied to the treatment of cancerous maladies. Five cancerous ulcers of the face and of other parts, he assures us, were completely cured by being sprinkled with this salt, very finely powdered. Dr. Hall, of London, doubted the nature of the maladies cured by Mr. Carmichael; but he regards carbonate of iron as a valuable remedy in the treatment of phagedenic ulcers, simulating cancer.

Mercurial Preparations. The solution of hyperoxygenated muriate of mercury, recommended by A. Wilson, vapour of cinnabar, &c. which have been vaunted as *anti-cancerous*, have never cured *cancerous* diseases; but *venereal* affections only, which, by degeneration, have assumed the appearances of cancers. Cayol makes an important remark—"Mercury, in whatever form administered, has always appeared to us to be hurtful, in diseases truly cancerous."

Alkaline and Acid Substances. These have been employed in turn, in accordance with the ideas adopted, as to the nature of cancer. M. Martinet, rector of Soulaines, pretended to having cured many occult cancers, by compresses steeped in a solution of ammonia; drops of the alkali were prescribed at the same time internally. Solution of potass was prescribed by Dr. Barker.

Carbonic acid gas was confidently proposed by Peyrilhe (who never could see any thing in cancer but an *alkaline acid*), not only as palliative, but as calculated to effect a radical cure. Oxygenated muriatic acid was spoken of in high terms about the same epoch; but of the much that is written, little is trustworthy.

Animal and Vegetable Substances. With regard to these, as in the case of alkalis and acids, their ephemeral reputation is partly owing to hypothetic fancies, charlatanism, and fortuitous circumstances.

Sedum acre, first recommended by Quesnay, has very recently been noised abroad by Lombard, chief surgeon to

the Military Hospital of Strasburg, who recounts many remarkable cures effected by this plant, fresh and applied to ulcers regarded as cancerous. Solander and Colden had formulæ, in which the juice or extract of the *phytolaca decandra* was the chief ingredient. Expressed juice of foxglove (fresh) diluted in the proportion of a spoonful to a pint of water, to be used in soaking compresses. Gastric juice of animals, (Senebier of Geneva). Ox blood proposed by Vanevy as a succedaneum for gastric juice.

Cataplasms of the pulp of carrot were eulogized A.D. 1766, as very efficacious, especially in cancer of the breast, by Sultzter, chief physician to the Duke of Saxe-Gotha. This remedy was abandoned, from want of success, in the practice of the French; but, in the interim, Bridault submitted it to experience, with the precautions adopted by every judicious practitioner: and in 1802 he published, what an experience of five and thirty years had apprized him, as to the medicinal properties of carrot.* Cayol, from many trials of this root, coincides with the observations of Bridault, viz. that "carrot cataplasm is inefficacious against cancer; but that it can ameliorate, and even cure, many darts, scrofulous, or other affections, which sometimes possess all the appearances of cancer, and which frequently determine this unfortunate organic degeneration in predisposed subjects."—*Clinique*, p. 521.

Opium, hemlock, hyosciamus, and belladonna, have likewise been used in the form of cataplasms, plasters, fomentations, &c. &c.

M. Steidèle indulged sanguine hopes of his ability to cure cancer, whether occult or ulcered, by the persevered-in application of compresses steeped in liquid laudanum, provided, (added M. Steidèle, and what an important qualifier!) "that the patients were not old; and, that their viscera were in a sound state." Cayol quotes, *Journal de Med.* tom. 82.

Cauterization.—Confessedly the first

means resorted to for destroying cancer, was the *actual cautery*, (*Hippoc. Epidem. Lib. vij.*) M. Leconte hit upon the ingenious idea of cauterizing the lower lip by solar heat, placing the affected part under a very powerful lens;—the operation was very successful.† This practice, more curious than useful perhaps, is thus commented on by Cayol:—"It is certain that this kind of cautery has not, like the actual cautery, the inconvenience of losing a part of its heat, before acting to the depth required; nor that of burning the neighbouring parts; but a solitary observation does not suffice for appreciating an operative process; and it does not appear that this possesses any advantage over the arsenical paste."

Electricity.

Dr. Easton (Dublin) relates the case of a lady, who, after having been cap-sized by a thunderbolt, saw, to her infinite surprise, a scirrhus tumor of the breast disappear. No remedy had been employed.

Cayol judiciously withholds his assent from the conclusion, arrived at by other authors, that electricity should be numbered among the curative means of cancer. "What comparison could be established between the effects of electricity with the precautions necessary not to compromise the life of patients, and the commotion produced by a clap of thunder?"—*Clinique*, &c. p. 523.

Different Topical Applications.

The reputation of *antiseptics* or *detergents* has been founded on erroneous diagnosis.

Standard authors having asserted that cancer in the last stage has been cured by Plenck's vulnerary water, it would be inexcusable not to indicate its composition. Take of—

Lime water, one pound,

Burning soot from an oven, an ounce,

White lead, half an ounce,

Mix and boil for quarter of an hour, and add—

* *Traité sur la carotte*, 8vo.

† *Mémoires de la Société Royale de Médecine*. An. 1776.

Liquid myrrh, half an ounce.

Compresses or charpie steeped in this liquid were applied to the surface of the ulcer.

Cayol closes his section on external remedies after observing, that of the innumerable list of topical applications, most of them act as escharotics or caustics; "and of the whole of these we know none preferable to arsenical paste;"—others, for the most part, are purely empirical nostrums. It would be impossible to enumerate every pharmaceutical preparation employed as a calnative: our author contents himself with naming two of the most celebrated—the plaster and liniment of Pissier.

Plaster. Take of—

Oil of linseed, two pounds,

Red lead,

White lead,

Yellow wax, of each eight ounces.

Make *secundum artem*, into an ointment.

This is spread over the skin, "and is applied to occult cancer, with the view of tranquilizing pain, and preventing ulceration."

Liniment. Melt together—

White wax, two ounces,

Linseed oil, four ounces.

When cool, add *tincture of opium an ounce.*

Spread upon lint, and use as dressings for ulcerated cancers.

SECOND CHAPTER.

Internal Remedies.

It would appear that the ancients did not employ internal remedies in treating cancerous diseases. Tumors of the mammæ, accompanying a kind of false pregnancy, were attempted to be discussed by reinducing the catamenial excretion. Hippocrates directed a decoction of elaterium to be quaffed, if the cancer followed a diarrhœa or rebellious cough; and, that the ulcer should be dressed with the dust of calcined copper.

Celsus says expressly that cancers which neither fire nor iron can heal are incurable.

If cancerous tumors attained a certain volume, Galen admitted their nature to be incurable, and contented him-

self with indicating such remedies as were calculated to check their progress.

In modern times a multitude of substances have successively been extravagantly praised in the internal treatment of cancer. Not one of them can be regarded as a specific. The majority of external remedies in different doses and forms have been administered internally. Storck's preparation of the *extract of hemlock* is unquestionably the most celebrated of these.

Hemlock. Cayol describes minutely the necessary pharmaceutical processes from the time proper for gathering this valuable plant till ready for being prescribed. The hemlock (*conium maculatum*) flowers in May and June, when it should be gathered and pounded with a wooden pestle in a marble mortar—next submitted to pressure—the juice passed through a strainer—thickened at a slow fire; to the consistence of thick extract; and lastly, mixed with a sufficient quantity of the dried leaves reduced to powder, to give it a pillular consistence.

One or two grains of this extract are commenced with evening and morning, gradually increasing the dose to a drachm and a half or two drachms daily. After each dose, the patient should drink a cup of tea, veal broth, or elder-flower water. In general, to obtain good effects from hemlock, the dose should be raised until slight vertigo, trembling, disagreeable feelings in the eyes, or diarrhœa, result. Should these symptoms be carried the length of poisoning, acids, emetics, &c. must be resorted to.

Should the cancer be external, various preparations of hemlock may be used locally; the leaves being applied in their natural state, or as cataplasms. The decoction serves for fomentations or injections. When the dried leaves only can be had, a small bag may be filled, dipped in boiling water, and applied to the part affected, when at a tepid temperature.

Hemlock plaster may be applied on indolent or somewhat painful scirrhi.

Such are the preparations with which Storck (believed at least that he) cured

cancers of the breast, womb, &c. towards the middle of last century.—Cayol justly remarks—"A circumstance which should encourage suspicion of the truth of Storck's observations, is, his having cited cases of cure only, thus insinuating, against all probability, that no cancerous disease had withstood his remedy." (p. 529.) The great name of this physician gave an extraordinary popularity to hemlock, and the *anti-cancerous* properties of this plant were supported by multiplied experiments made in every country.

No good ensued, on the assertion of Dehaen, from its use in one hundred and twenty cases. Eight cases of uterine cancer treated in accordance with Storck's method were not ameliorated. Fothergill in England, Bierken in Sweden, Akenside, Rikmann, &c. &c. regarded the extract as ineffective in the treatment of cancer. In the hands of others, notable relief, but never a cure, followed its employment. "Some went even so far as to say that it exasperated the evil at the very time while seeming momentarily to mitigate it." Cullen and many French practitioners agreed as to the "virtue" of hemlock, in curing certain scrofulous and syphilitic "engorgements." Of later years, M. Alibert repeated with care Storck's experiments upon more than a hundred women affected with ulcers of the womb, &c. "without deriving the least advantage."—*Nouv. Elem. de Therap. tome i. p. 425.*)

From these and other observations, Cayol deduces that "extract of hemlock acts, in the first instance, as a stimulant, and afterwards as a narcotic, when the dose is raised to a certain point. It appears of use in facilitating the resolution of many kinds of chronic *engorgemens*, particularly scrofulous and syphilitic affections. It never cures scirrhus nor cancer; but occasionally checks their progress, and renders them less painful. In the latter cases it appears to us to act by modifying advantageously the chronic inflammation of different tissues surrounding the degenerated parts. If, after producing this happy effect, the remedy continue acting as an excitant, it almost always

irritates the cancer, and accelerates its progress." (p. 530.)

Belladonna, Hyosciamus, &c. Lam-bergen prescribed a scruple of the dried leaves of belladonna in ten cupful of boiling water. The patient commencing with a cupful of this infusion every morning fasting; the dose gradually augmented, till dryness of the throat, nervous symptoms, &c. required the suspension of the remedy. This plan was modified by Darluc, Amoreux, Marteau de Grandvilliers, Campardon, and Cullen. It would appear that, when circumspectly employed, belladonna, like hemlock, accelerated the cure of many kinds of lymphatic *engorgemens* simulating cancer, and checked the progress of some diseases of a truly cancerous nature.

The same may be said of hyosciamus, wolfsbane, water-fennel, cherry-laurel—"very active medicines, and the employment of which requires so much the more prudence, as their physiologic and therapeutic effects have not yet been suitably appreciated"—(p. 531.)

SALTS AND OTHER MINERAL SUBSTANCES.

Acetate of Copper,

Or *verdigrise* was the chief ingredient of Gamet's remedy, and of the pills of Gerbier—two recipes which in turn enjoyed great celebrity in curing scirrhi, cancers, and inveterate ulcers of the breast and womb. M. Mitag-Midi, a celebrated physician, who had strong prejudices against preparations of copper, assures us, nevertheless, of having seen many cancers of the womb, throat, axillæ, groins, and mammæ, cured by Gamet's remedy.

Dr. Solier of Romillais, by order of the faculty of Paris, made numerous experiments with the preparations of copper, in order to estimate their value as anti-cancerous remedies. An admirable report was published in 1778 & 9 at Paris. It resulted from these experiments, that verdigris produced no effect on cancer of the breast; but acted more beneficially, perhaps, than any other remedy on *cutaneous* cancers. When

the dose required being pushed beyond ten or twelve grains, precordial anxiety, colic, obstinate diarrhoea, vomitings, &c. resulted. It has been suggested to renew experiments with Gamet's and Gerbier's recipes thus modified.

"Take of acetate of copper and iron filings, of each two scruples and a half. Triturate these substances for a sufficient time in a copper mortar with a pestle of the same metal. Add one drachm of ext. of hemlock, mix thoroughly, and divide into pills of a grain each." Begin with one of these daily, augmenting the dose cautiously up to twelve or even fifteen grains. Acetate of copper during the whole may, as by Gamet, be applied topically in the form of ointment or injection.

White Arsenic

Was announced in 1775 by M. LeFebvre de Saint Ildefond as an *experienced remedy* in curing occult or ulcerated cancer.

Four grains of it were dissolved in a pint of distilled water, of which the patient took a spoonful every morning, united with an equal quantity of milk, and half a drachm of syrup of diacordium. Eight days thereafter (there being no contraindication) a second dose was given in the evening, and perhaps a third at mid-day. After the contents of the first bottle had been consumed, a second quantity was prepared from six grains instead of four; and eight grains was the maximum. Six bottles sufficed in general in curing cancer of the breast. The ulcer was bathed daily with a solution of arsenic (viii. grs. to the pint) and covered with a cataplasm of carrot pulp, boiled in the same solution, to which were added sugar of lead, laudanum, and extract of hemlock, in varying proportions.

In 1778, M. Roennow published the results of his experience. During fifty years trial, says Cayol, "of this remedy, he averred having cured thirty well characterised cancers; in short, he did not hesitate to announce arsenic as a specific against the cancerous vice." After alluding to such positive assertions in connexion with "les annonces fastueuses des charlatans," Cayol re-

marks, "nevertheless, the arsenious acid employed at Stockholm by Arrel, in Prussia by Metsger, in England by Bell, and in France by Desgranges, of Lyons—never effected a single cure of cancer, and frequently occasioned casualties requiring a discontinuance of its use." Cayol never saw any bad effect result from arsenious acid, or from the arseniate of soda used by him in treating ague, "according to the formula published lately by M. Foderé."

Carbonate, Muriate, and Tartrate of Iron.

Experiments, &c. and recorded results are too few to justify any deductions from the employment of the above preparations.

Muriate of Baryta.

Though confidently proposed by Crawford, of London, has enjoyed but an ephemeral reputation. Of the three cases (only!) given by Crawford, Cayol admits only one to have been truly cancerous. Pinel and Alibert found that water saturated with muriate of Baryta as recommended by Crawford, induced casualties, when carried beyond six drops per dose.

We conclude this article with an epitome of the instructive contents of the remaining portion of the chapter entitled—

DIFFERENT EMPIRICAL RECIPES.

Grey Lizard—(Lacerta Agilis.)

Is one of the *anti-cancerous* remedies, the virtues of which have been the more exalted on account of its singularity. J. Flores, of the University of Guatimala, in Mexico, was the first who published on the subject in 1781, his memoir being reprinted the year following, at Madrid.

His recipe ran thus—the heads and tails of lizards to be cut off, and after stripping off their skins and entrails, to be bolted forthwith, "tout palpitations." One, two, or three, were thus to be devoured daily. Cataplasms were applied to the cancers. The use of this specific was said to be followed with febrile heat, anxiety, sweats, profuse alvine and renal discharges—convulsi-

ons, &c. The grey lizard was so celebrated by the Spanish physicians, that Daubenton and Mauduyt, two celebrated naturalists, were requested by the Royal Academy to ascertain its species. The case of a wench at Cadiz was much spoken of, who got cured in the space of twenty days of an ulcerated cancer of the breast, by gobbling a lizard every morning. These were published on the virtues of the lizard in Sicily and Germany by Grass and Römer. It appears that the French Doctors were not so successful in *their* experiments. M. Bayle directed a man affected with a cancerous tumor of the face to take the remedy—fifty grey lizards were swallowed in the space of fifteen days! “this remedy so vaunted produced no physiologie nor therapeutic effect.”

Bleeding.

Repeated blood-letting has been included among the curative means of cancer by many authors, more particularly by Valsalva, and Fearon, of London. By Fearon, leechings and topical applications of lead were ordered. If the cancer were internal, general blood-letting was practised, and with effect much more gratifying than could be brought about by opium or hemlock. Milk and vegetable diet only was permitted.

Pure Water.

Nothing, not even pure water, has been excepted as calculated for curing cancer, or preventing recurrence after an operation. Pouteau, of Lyons, flattered himself, that many had been radically cured by drinking five or six pints of iced water, during the four and twenty hours, *as the sole nourishment*. The appetite ceased in the course of the third day, his patients bearing the privation well. “There was one, who lived fifty days, and even two months without tasting any thing but pure water.” If the breath became sour, and the tongue lemon-coloured, two or three drachms of magnesia were given in the forenoon. In the course of two months the patients returned cautiously to the use of soups and solid aliment.

Cayol says that, after examining Pouteau's facts, “it will be seen, that he cured nothing more than chronic phlegmasies.” Dr. Lamb adopting the ideas of Pouteau, recommended patients affected with cancer to be nourished with distilled water only, for a certain time.

The *examen* of the different treatment recommended up to this hour is not pushed further by Cayol. Of the numerous pretended specifics, there are few to be found which can be employed with benefit, not in curing, but even in assuaging pain for a transient period. “When we consider all that has been said and published upon this subject by trustworthy men (for we do not here speak of vagabonds and charlatans)—it were devoutly to be wished for the honour of medicine, that we could attribute so many falsehoods to the nature of the disease and the difficulty of diagnosis. But, independently of these causes, we cannot overlook the illusions of self-love, the desire of notoriety which speculates on the dearest interests of humanity, and a shameful weakness, not permitting fruitless attempts to be avowed, and which leads so frequently to imposture: a kind of moral degradation, the *tableau* of which is not less afflicting than that of our physical infirmities!

Although the public have so frequently been abused, we must avoid concluding, that remedies which may yet be proposed for the treatment of a disease as yet regarded incurable, should be rejected unexamined. The nature of syphilis is not better known than that of cancer, and it is infinitely more varied in its forms; nevertheless, we are acquainted with a mean of cure, and the mean is purely empirical: it was by a suite of experiments and trials that the discovery was attained; and why may not a specific against cancerous diseases be also discovered.

Assuredly praise is due to those who devote themselves to experimental researches on the treatment of maladies reputedly incurable; but such attempts should be directed with prudence, and the results candidly published.”

VAGINAL DISCHARGE IN VERY YOUNG FEMALES—SUSPECTED VIOLATION.

A girl, seven years of age was brought by her mother to Dupuytren's consultation for his advice respecting what she thought were the effects of violence committed on her child. There was a copious yellow-coloured discharge from the vagina, and the labia were red, swollen, and painful. No excoriation or laceration however was to be perceived, and the hymen remained perfect. Dupuytren assured the parents that the symptoms by no means justified the suspicion which they entertained; he could not say positively that no attempts had been made to injure the child; but only that the existing symptoms might arise from other causes. Indeed so frequent are cases of this description at particular periods that some have suspected that they may depend upon some epidemic influence.

Dupuytren was lately consulted by a lady about her young daughter, in whom a purulent vaginal discharge coming on without any apparent cause had been observed for several days; it was of a greenish yellow colour, stained the linen deeply, and was so acrid as to occasion painful micturition. Dupuytren regarded the case as one of catarrhal inflammation of the genitals; and predicted at the time that in all probability several cases of a similar nature would present themselves to his notice in the course of the week: and so it was: they were all treated successfully with tepid baths, demulcents and soothing washes.

In the record of the Faculty of Medicine for 1815, there is the report of a commission (consisting of MM. Dupuytren, Roux, Dubois, and Desormeaux) on a case of suspected violation on the body of an infant only 14 months old, in consequence of a statement which Dr. G——d had made to the prefect of the police, "that the hymen of the infant had been torn, and that the laceration was quite recent." We may here state that the mere circumstance of the hymen being entire, or not, is far from being a conclusively exculpatory or condemnatory circum-

stance; it may be entire, and yet the legal crime of rape may have been perpetrated; and on the other hand, it may be destroyed in other ways from that of sexual pollution. Moreover we have already seen that the existence of a discharge from the vagina is most unsatisfactory evidence; and the same remark may be made as to the occurrence of tumefaction and even of ecchymosis of the external genitals: in short, these and other symptoms merely indicate the presence of an inflammation, but do not at all point to the cause of that inflammation, and we must be careful not at once to suspect a crime, merely because it is possible that it may have been committed. The commission above named acted judiciously in limiting their report to the bare statement, that the infant was affected with a puriform discharge.—*Journal Hebdom.*

ON CERTAIN MENTAL ILLUSIONS.

In a memoir read by M. Esquirol before the Institute, in October, 1832, the learned author endeavoured to establish the distinction between mental hallucinations and mental illusions: the former are the mere offspring of the disturbed mind, arising without any evident cause, and referable to no distinct operation preceding them; whereas the latter are the results of certain impressions made upon the body, but the nature of which impressions the insane strangely mistakes and perverts: the former are altogether mental phenomena; the latter are mental indeed, but generated from and depending upon previous corporeal influences. These corporeal influences are very generally painful sensations, either on the more immediate organs of sense, or on some of the viscera contained within the great cavities. A few examples will readily indicate that set of cases which Esquirol denominates "illusions."

Illusions depending upon a Disturbance of the Organic Sensibility of the Encephalon.

Case 1. A young lady 18 years of age, having for some time suffered from a severe pain on the crown of the head, at length insisted that there was a worm within her head devouring her brain. No reasoning could disabuse her mind of this illusion; and she was convinced that the only method of relieving her was the extraction of the worm. An incision was accordingly made through the scalp, and a portion of fibrine was drawn out, with much ceremony, as if to corroborate the truth of her prediction. She was satisfied, and expressed great pleasure. The wound was kept open for two or three months, by which time, not only all the pain, but the mental illusion as well, had entirely subsided.

Case 2. A countrywoman was admitted into the Salpêtrière, in consequence of intense pain at the top of the head, which she attributed to the presence of some animal concealed under the skin. An incision was made through the scalp at the pained spot, and a portion of an earthworm was then shewn to the patient, as if it had been extracted from the wound. She testified great joy at the time, being assured she said, of her speedy recovery; but the hope of this fortunate event was soon baffled, for, in a fit of rage, she tore open the issue which had been established at the wound, and the mind became as unhinged as ever.

Case 3. A lady, 30 years of age, who had fallen into a state of hypochondriasis, after suffering great mental distress, was impressed with the idea that her brain had become petrified. Some time after, she thought that it had softened, and was in a fluid state. On the dissection of this patient, a scrofulous deposit was found in the anterior lobe of the cerebrum.

Illusions depending upon a Disturbance of the Organic Sensibility of the Abdominal Viscera.

Case 1. Ambrose Paré mentions the case of a hypochondriac, who believed that he had some frogs in his stomach,

and who was cured by a smart purgative or two, the attendants having cunningly introduced a frog or two into the night-stool before the patient went to it.

Case 2. M. Esquirol examined the body of a woman who had died at the "Salpêtrière;" she had believed that some cruel animal was in her stomach. This viscus, at its pyloric orifice, was found cancerous.

Case 3. In 1832, there was a woman in the Salpêtrière, who suffered from repeated attacks of severe colic. Her own idea was, that a regiment of soldiers lay concealed in her belly, and that she could feel them struggling and fighting with each other. Dissection shewed that a chronic peritonitis had existed for a length of time, and had glued large portions of the intestines together.

Case 4. A woman, 57 years of age, of a strong and sanguineous temperament, and so extremely devout and religious in her way, that she was styled by her keepers "la mère de l'église," because she was constantly talking of some scriptural subjects, was impressed with the belief, that all the apostles and evangelists had taken up their residence within her bowels; moreover, that the Pope held his conclave there; and that, occasionally, even some of the Patriarchs of the Old Testament sojourned with his holiness. On examining the abdominal viscera of this woman after death, it was discovered that all the intestines had become agglutinated together, in consequence of chronic peritonitis.

Case 5. Similar morbid appearances were found in the abdomen of a lunatic, who believed that a devil had taken up his abode in his stomach to torture him. In this case, the skin, over almost every part of the body, was singularly insensible to mechanical injury; it might be pricked, pinched, and cut, without the patient appearing to suffer any pain.

Case 6. A lady, aged 40, mother of several children, had enjoyed good health

up to the year 1826, when she experienced a dreadful shock to her feelings, from seeing a young girl of her acquaintance killed by a carriage being driven over her body; she became affected with violent palpitations, with syncope and hæmoptysis; and being summoned to give her evidence upon the trial, other symptoms, such as vomitings, convulsions, grinding with the teeth, a sensation as if something was alive in her stomach, and every now and then was rising up her throat, began to shew themselves. This delusion became gradually more and more fixed in her mind; and no reasoning could dissuade her from the belief, that a common earthworm had found its way into her bowels, and was gnawing and eating them away. This lady was living at the time in the country, and a solemn consultation was held among the wise women of the village, respecting what should be done to expel this worm; at length, the ingenious idea occurred to them, that this worm, if actually in the stomach, might be fished out with a piece of bait, on the very best and most acknowledged rules of angling! For this purpose, the heart of a pigeon was taken and made fast to one end of a string; it was then swallowed by the patient, and after having remained for a sufficient length of time, to entice the worm to lay hold of it, it was withdrawn by means of the other end of the string! but, alas! neither worm, nor even pigeon's heart returned upwards; for the monster had been so greedy as to bite through the string just above where it was secured round the bait!! Some of the savantes proposed to repeat the operation, affixing a hook at the end of the string, which was to be introduced into the stomach; but their advice was over-ruled, and nothing further was done; as her friends now insisted that some regular physicians should see her.

At first her malady was considered as simple hypochondriasis, dependent probably upon vermination, and Dupuytren among the number being consulted, wrote a prescription for a mixture consisting of jalap, pomegranate bark, and calomel; but her husband, (who seems

to have not been much more sane than his lady,) upon seeing the word calomel, tore the prescription in pieces, vowing that such a remedy was given only to libertines. All the doctors of Paris were consulted in their turns; some would do nothing; others advised the use of different anthelmintics. M. Manry, physician of the hospital St. Louis, regarding the case as one of pure delusion, thought that it might be most easily cured by a counter delusion; and therefore, seeming to agree with the patient's opinion of some live animal being in her stomach, he proposed to extract it by an operation. Accordingly, an incision was made through a fold of the integuments of the epigastrium, (as in making a seton,) and the patient made to believe that the stomach was now laid fairly open, and that a blind worm could be distinctly seen lying at one corner of it; that with some difficulty it was seized and drawn outwards till the patient could lay hold of it herself, and gradually extracted it. All the good anticipated was not however obtained in this instance; for most unfortunately the patient began to suppose that another worm had taken up its abode since the expulsion of the former one, and so quick of growth was this second worm imagined to be, that in the course of a few days it had reached the length of 200 ells.

The issue of this case is not known, as the woman returned into the country.

In the following case, the deception practised was much more successful. A young countryman was fully persuaded in his own mind that he had swallowed a serpent when drinking some water that was rather muddy; that it had gradually grown larger and larger; that it moved about in all directions; sometimes up into his head, at other times down to his anus; now encircling the heart, and now twisting itself round his bladder. When it was disposed to be rather too lively in its motions, the patient said he was obliged to seize hold of one of its rings, through his abdominal parietes, and squeeze it firmly. He repeatedly tried to kill it, by pushing a long sharp

needle into its head, but the instrument has always slipped off when he made the attempt. Whenever he was hungry, the serpent always became importunate. On all other subjects this patient was quite rational; and as he urgently requested that this serpent should be extracted, because he was assured that he should be quite well then, M. Manry performed the operation, as in the preceding case; and from that hour all his sufferings vanished. One day indeed he began to be alarmed at some uneasy feelings in the stomach, which he thought might arise from some ova of the serpent having been left behind; but his fears on this score were at once quieted, when he was told that the serpent was a male. The cure in this case was permanent.

Illusions depending upon a Disturbance of the Sensibility of the Generative Organs.

A woman, well advanced in years, was haunted with the idea that the devil had crept into her womb, and that nothing could dislodge him from his dark abode. This woman died, and it was found on dissection that there were several hydatids on the external surface of the uterus.

In another case, in which the patient believed that some venomous animal had entered her womb, and was accordingly in the habit of pushing pieces of meat up her vagina to entice it down—a similar disease was found affecting the uterus.

Such are a few examples illustrative of delusions which appear to take their origin from corporeal impressions, acting upon a disturbed mind. We mean not to enter into any investigation of this most abstruse subject; our only motive has been to afford some authentic data to the enquirer.—*Journ. Hebdom.*

FURTHER PARTICULARS RESPECTING
THE MEDICINAL PROPERTIES OF THE
CREOSOTE.

In a former, as well as in this present number, we have alluded to the general

properties of this recently-discovered substance, which from all accounts seems to be a potent, and consequently, under a judicious use, a useful remedy. A drop put upon the tongue causes very severe pain, and blisters the part; even the epidermis is usually detached from a portion of the skin, moistened with the pure creosote.

The solution of it in water is the preparation which Reichenbach has chiefly employed;—its strength may be made to vary according to the strength of the irritation required; but in most cases a solution of one part of the creosote in fifty of warm water will be found most convenient. He has used it successfully in scalds and in burns, whether the epidermis has been detached or not; in numerous cases of chronic herpes and impetigo, in itch, &c. When these cutaneous diseases are very obstinate and resist the effects of the creosote solution, he is in the habit of applying the substance either directly and in its pure state, or mixed with lard, so as to form an ointment;—under the use of this ointment, the pustules or vesicles very quickly dry and fall off. The period usually required for the cure varies from one to three weeks; and as a matter of course, this must depend on the duration of the disease, and on the constitution of the patient. Several cases of troublesome, and sometimes apparently malignant ulceration are reported as having been cured by the creosote. Scrofulous ulcers are benefited by it in an especial degree; and when there are any sinuses or fistulæ, no injection will be found so useful as water impregnated with the creosote. If the ulcers should be obstinate, it may be well to touch the edges of them occasionally with the pure creosote; but in most cases the application of pledgets of linen wet with the solution will be found sufficient. Tooth-ache may be often cured instantaneously by introducing a drop of it into the cavity of the decayed tooth. Even the mere gargling with the solution in water, will not unfrequently relieve the pain. The efficacy of the use of the creosote internally we should deem much more problematical, and especially in such a

disease as hæmoptysis, for which it has been recommended; the dose given was four drops rubbed up with lump sugar, (it is not stated whether the four drops are to be given in one or in divided doses,) and this was repeated for six or seven days.—*Bulletin Therapeut.*

HYPERTROPHY OF THE MAMMÆ.

Galen is the earliest author who has noticed this malady, and most of the comprehensive records of disease published since his time present some cases of it. Boulli mentions the case of a woman whom he saw at Koenigsberg, and in whom the mammæ had become so prodigiously enlarged that she was obliged to support them with bandages, passed round her body and across her shoulders; each of them must have weighed 30 pounds at least. This poor woman had been advised to have the mammæ extirpated, and this murderous operation would have been performed, had Boulli not happened to visit her; he at once discovered that the hypertrophy of the gland was connected, or at least associated, with amenorrhœa, and ordered emmenagogue medicines, derivatives, leeches to the ankles, cupping-glasses to the hips, &c. The result was quite satisfactory; the menstrual flux was restored, and the volume of the mammæ speedily decreased.

Indeed it is a very common occurrence, that when the catamenia have been suddenly checked, the mammæ became swollen and painful. Dorsten relates the case of a young lady, in whom an extraordinary enlargement of the mammæ took place in the course of one night; it was very evidently connected with the retention of the milk, the lady being a nurse at the time; the left breast measured 37 inches round its base, and 18 inches from the base to the nipple—the right one 31 inches round, and 17 in height. Dorsten employed emollient fomentations and revulsive remedies; but, unfortunately, his patient was so feeble, that she could not continue the course prescribed. The catamenia were suppressed for six

months, all the means which had been used to restore them having proved quite ineffectual. The lady died; and when the breasts were weighed after death, the left one was found to weigh 64 pounds. No decided structural change could be detected in the gland, except the mere hypertrophy of the cellular tissue which enters into its composition.

Hey, in his practical observations on Surgery, alludes to several such cases, in all of which the enlargement of the mammæ was associated with amenorrhœa: one of these is so remarkable that it deserves notice. A young girl, æt. 13, on the first occurrence of the menstrual flow, had imprudently put on a damp chemise, with the hope of stopping it; the discharge was thus suddenly arrested, and could not be recalled: the mammæ forthwith began to swell, and gradually attained such a size, that she could not keep herself erect, but was obliged to bend her head and body to diminish the extreme tension, and to draw her limbs up to her stomach, for the purpose of supporting the huge pendulous glands. The left mamma, being the most cumbersome, was extirpated—it weighed 15 pounds. The girl was cured, but ever afterwards had a slight curvature forwards of the spinal column.

The hypertrophy of the mammæ sometimes takes place during pregnancy, and disappears with the cessation of the milk fever after delivery. When the nipples are too small, so that the child cannot easily take hold of them, the tendency to the engorgement of the glands is necessarily greater. Professor Cerutti alludes to the case of one of his patients, who was in this condition. The left mamma attained the dimensions of 38 inches in circumference, and 15 in height.

This woman was safely delivered, and when the milk fever set in, the breasts did not seem to become any longer; as it subsided, they very rapidly decreased in volume, and in the course of a month or so, they measured round their bases only 18 inches.—*Meckel's Archives fur die Physiologie.*

III.

CLINICAL REVIEW.

ST. GEORGE'S HOSPITAL.

I. CLINICAL REMARKS ON UNUNITED FRACTURES. By Mr. BRODIE.*

A case of ununited fracture which had been received into the hospital, gave rise to some clinical remarks by Mr. Brodie, on the methods which have been adopted for the cure of this unpleasant accident.

Mr. Brodie considered, in succession, the employment of the seton—of pressure—the removal of the fractured extremities of the bone—irritation of those extremities, and the subsequent retention of lint between them. We may mention, before we proceed to particulars, that when a fracture is not repaired by bony union, it either unites by the intervention of a ligamentous substance, or a false joint is formed between the ends of the broken bone. When the latter is the case, those ends are covered with a ligamentous structure, and surrounded by a capsular ligament lined with a synovial membrane. In the case which formed the peg upon which the clinical lecture was hung, the former condition obtained.

In alluding to the employment of the seton, Mr. Brodie observed that Dr. Physic tried it in three cases, in two of which it was attended with success. Experience would appear to shew, that it rarely succeeds in the lower extremity.

"Amongst the cases in which Dr. Physic adopted it, I have been informed that there was not one case of ununited fracture of the lower extremity in which it did not fail: indeed, I am not aware that there is a single case on record in which it has succeeded in the lower limb, excepting one which was under my care. The patient was a boy, in this hospital with an ununited fracture of the thigh. A seton was in-

troduced between the broken ends of the bone, and he recovered."

Mr. Brodie alludes, in a favourable manner, to the mode of pressure employed by Mr. Amesbury. Mr. Brodie has known it prove successful—in fact, it answered in a case of Mr. Brodie's which occurred in the hospital last autumn.

"In former times, it was a common practice to cut down upon the bones engaged in an ununited fracture, and to remove their extremities with a saw: in other words, to make a severe compound fracture. This practice has been, I believe, occasionally successful; but the instances of its success have been very few, compared with those of its failure. I remember conversing with an old surgeon of eminence, who had had frequent opportunities of seeing this practice resorted to, and he told me that he had not himself known a single case in which it had been attended with advantage. But, at any rate, there would be a decided objection to it in this case; for if I were to remove much of the tibia with the saw, the severed ends would not come in contact again, unless I were to perform the same operation on the fibula; and this would be altogether a frightful operation, attended with considerable danger to the patient. What, then, can be done? Sir E. Home was accustomed to mention, in his lectures, delivered in this hospital, a remarkable case which was under the care of Mr. Hunter. A patient had an ununited fracture of the humerus, in which a false joint had formed. Mr. Hunter cut down upon the part, and having introduced a spatula, scraped the fractured ends of the bone; inflammation followed; lymph was effused, and became organized. Bone was deposited in its centre; and in a short time bony anchylosis took place."

We may now glance briefly at the case which gave rise to the preceding observations. It was that of a little

* Med. Gaz. July 26th, 1834.

boy, about five years of age, who had broken both bones of the right leg, near its centre, two years prior to his admission into St. George's. Bony union had not been obtained, and continued pressure, under, we believe, the superintendence of Mr. Amesbury, as well as the introduction of the seton, had been tried without effect. Under these circumstances, Mr. Brodie cut down upon the tibia at the seat of fracture, removed a ligamentous sort of substance that connected the extremities of bone, scraped the latter, and dressed in the wound with lint. He did not attempt a similar operation on the fibula, which was broken a little lower than the tibia, because it would be difficult, dangerous, and unnecessary.

II. CLINICAL REMARKS ON SOME CASES OF DISEASE OF THE URINARY ORGANS. By Mr. CÆSAR HAWKINS.*

Mr. Hawkins has communicated to the public some interesting cases, and some valuable observations on diseases of the urinary organs. We shall take the opportunity of noticing three instances of disease of the kidney, in connexion with stricture of the urethra. We do this in order to illustrate the pathology of that serious disease, and to display the changes in various portions of the urinary apparatus, that follow an obstruction to the passage of urine through the urethra.

CASE 1.—*Stricture—Thickening of the Bladder—Chronic Inflammation of the Kidney.*

John Weighell, æt. 49, was admitted into St. George's Hospital in August, 1833.

He had laboured under a stricture of the urethra for twenty years. When admitted, the smallest catgut bougie could not be passed. There was a hard cartilaginous tumor, inclosing a cavity in the perinæum. The urine was abundant, pale, highly alkaline; it contain-

ed a peculiar mucus, resembling a powdery matter, which slightly floated in it, and was intermediate in appearance between mucus and albumen. On applying heat, or adding nitric acid to the urine, its coagulation proved the presence of albumen. There was slight occasional pain in the loins, which, on several occasions, was mitigated or temporarily relieved by a blister.

Instruments were gradually passed through the stricture, but not into the bladder, their point being obstructed by what appeared to be an abscess in the prostate gland. The latter conjecture was supported by the circumstance, that a good deal of pus was evacuated separately from, and before the urine, the passage of which it occasionally obstructed. The progress was so far calculated to give encouragement, when a train of symptoms was established, which Mr. Hawkins has described with vigour and correctness. We shall venture to extract the description, and the commentary added by the lecturer.

"You have seen Weighell very nearly dying of a sudden increase of real disease, to a return of which he is still liable at any time. It was in January last that he became low-spirited and out of health; then he had occasional rigors, pain in the back and groins, with more difficulty in making water; then in a few days he had a great quantity of blood in the water, which came suddenly, and continued for two or three days; and before it ceased, there came away with the urine a very large quantity of pus, which continued for some little time, and then ceased. While he was at the worst, he lay in a state of listless half stupor, with a quick, feeble, intermitting pulse, and the brown tongue of typhus fever; and he had occasional delirium, and was frequently crying from extreme depression of mind, when not asleep and stupid. These symptoms continued, more or less, for nearly a month, when he began to revive and recover strength; and the symptoms I have mentioned, both local and constitutional, and as connected with the urine, gradually went away and left him as you now see him.

* Med. Gazette for June 21st and July 26th.

Now, what I believe to have happened during this time, was the formation and bursting of an abscess into one kidney, and that probably the right, from an affection of respiration, with pain on that side, which he laboured under for a few days. The discharge of pus from the kidney occurs in three different states—first a quantity is secreted from the tubular structure of the kidney, and from the infundibula and pelvis, without any cavity like that of an abscess, and while the cortical substance is only inflamed. I have seen this discharge take place suddenly, and to the amount of many ounces daily; so that it seemed almost impossible that it could have happened from the secretion from a mucous surface only; and yet dissection has shewn that it did so. Secondly, you find small quantities of pus partially confined in cysts, consisting of the infundibula and tubes, enlarged and dilated; these cysts communicating with the excretory tubes. Thirdly, you find circumscribed abscesses in the kidney, not communicating with the excretory tubes; even these, however, you can often trace to the commencement of the tubes, where a drop or two of pus, confined by adhesive inflammation, become the origin of larger collections of matter.

I judge that Weighell had a circumscribed abscess, from the rigors, and so on, *preceding* the purulent discharge, and because there was also a large quantity of blood before the pus, as if the wall of an abscess had been ruptured to give exit to its contents. If I am right on this point, the abscess has since probably filled up."

The treatment employed during this condition of stupor were stimulants, of course—a blister to the right side—and a blister, also, to the nape of the neck.

The sequel of the case may be briefly stated. The patient became gradually reduced in strength—emaciation made progress—about the 20th of June he was attacked with diarrhoea, attended with much general pain in the abdomen—and he died on the 6th of July, having suffered for a day or two from pain in the head, unaccompanied, how-

ever, with actual stupor. During the period that elapsed between the comatose attack and his death, the urethral symptoms continued nearly stationary. The suppuration from the abscess that was thought to exist in the prostate was diminished, and the cartilaginous tumor in the perinæum had increased. A catheter was occasionally passed.

Dissection. The cartilaginous tumor in the perinæum was placed anterior to the stricture, and contained a small abscess, communicating with the urethra. The stricture was itself broad and firm, white in appearance, and situated rather on the left side of the urethra. A catheter of tolerable size could be passed through it. The prostate gland contained an abscess, capable of holding a table-spoonful of pus. At the side of the verumontanum was an opening into the abscess, in which the extremity of the catheter had frequently been involved. The bladder was thickened to the extent of more than half an inch—its muscular fibres were prominent and enlarged, and its mucous membrane was dark-coloured, vascular, and folded into numerous little pouches. The ureters, the pelves of the kidneys, especially the left, and the infundibula, were in some degree enlarged, and their mucous membrane was inflamed. The secreting structure of both kidneys was condensed, and of a yellow colour; the left, which was nearly of its natural size, was more vascular and brittle than the right, which was diminished to half its natural bulk.

The chain of consequences resulting from the stricture of the urethra, and the lodgement of urine in the bladder, in the ureters, and in the pelves of the kidneys, are obvious even to the inexperienced pathologist. Perhaps it may be briefly, though not quite correctly, summed in the expression, that chronic inflammation was induced in all the portions of the urinary apparatus affected by the urinary accumulation. The case is interesting, because it informs us what we may expect, and what we should avoid. Mr. Hawkins judiciously dwells upon the circumstance, that pus may be secreted from the mucous membrane of the kidney, in a man-

ner and to a degree which might reasonably warrant the suspicion of a circumscribed abscess in that organ.

CASE 2. — Stricture — Effusion of Urine — Inflammation of the Kidney.

Pollard Tate, æt. 33, admitted June 37th. He had suffered from stricture, with occasional retention of urine, for six years prior to his admission; but he had not adopted any treatment for the malady. Five days previous to admission, he felt, when in bed, a desire to make water; but merely a little dribbled away with much straining, and subsequently it was only voided in drops. On the following day, the penis began to swell, and on the next, the swelling extended to the scrotum; on this day he had rigors.

On his admission, the penis and scrotum, the perineum, and lower part of the abdomen, were enormously swelled, and of a vivid red colour: he was in very great pain, with some fever, and the bladder was much distended with water.

"Now, I told you, some time ago, when speaking of effusion of urine, that I liked, if possible, to pass a catheter into the bladder, and in making the necessary incisions, to let one of them reach the instrument in the urethra, near the usual seat of the stricture. I found, however, here that the catheter would not at first pass, from the tense state of the parts, and from the quantity of sloughs in which the point was obstructed, even near the end of the penis; I therefore made several incisions in the scrotum and penis of considerable depth and length, and another in the perineum, down to the usual situation of the effusion; which, last, in fact, gave exit subsequently to some urine, besides that which came through the catheter. I gave him fifty drops of laudanum, and had him placed in a warm bath as soon as the hæmorrhage ceased. Two hours afterwards he was much more comfortable; the swelling was not above half the size it had been previously; and after some little difficulty, the catheter now entered the bladder, and drew off the water which distended it."

The skin was prevented from sloughing by the incisions—sloughs of cellular tissue came away—and though erysipelas supervened, it was mild: and all appeared to augur favourably for the patient. We should state that, four or five days after his admission, a calculus, like a grain of coffee in appearance and in shape, was removed from one of the incisions in the penis. It seems not unlikely that this was the indirect consequence of the stricture, and the immediate cause of the effusion of urine—sticking in the narrowed passage, it might totally obstruct it.

On the 3d of July, an unfavourable change was noticed. The patient became affected with sudden and complete prostration of strength, a copious perspiration, and coldness of the hands and feet. Stimulants were of little or of no avail in removing these alarming symptoms. On the 6th, there was slight diarrhæa, and a little tenderness of the abdomen, and on the day on which he died, the 8th, pain was experienced in one wrist-joint.

Dissection. "The bladder was nearly in the same state as Weighell's, much thickened, and reticulated, and inflamed, and contained a good deal of thick-bloody urine. The ureters were very much dilated and inflamed, and both of them were twisted and obstructed near the kidney, as you may see, by other preparations in the museum, is often the case in stricture. The pelves of the kidneys, and infundibula, were much more distended than in Weighell; in a high state of inflammation; and the kidneys themselves were coated with thick yellow lymph; and all these parts were on both sides full of a dark, bloody purulent secretion, quite pulpy in consistence, and which had passed down in great quantity into the bladder. The structure of both organs was inflamed, but not yet condensed or diminished in bulk, as in Weighell. In the right kidney, where most lymph had been deposited, one or two of the infundibula looked like distinct abscesses. Subsequent examination, however, shewed that this was not the case, the cavities all communicating with the pelvis of the kidney by continuous mucous surface."

Mr. Hawkins directs particular attention to three important circumstances:—the absence of distinct symptoms characteristic of renal disease—the abundant secretion of purulent matter from the mucous membrane of the kidney and ureter—the sudden supervention of symptoms of prostration, and the speedy occurrence of a fatal termination. The first should teach us caution—the second should enlarge and correct our opinions—and the third may diminish our surprise at the comparatively sudden manner in which some patients die after the operation of lithotomy, or during the progress of a case of stricture, when the local disease appears to be yielding in a satisfactory manner.

III. REPORT ON HERNIA, CONSISTING OF CASES EXTRACTED FROM THE NOTE-BOOK OF MR. CÆSAR HAWKINS; with Clinical Remarks.

There are few subjects which on the whole present such a variety of interesting points for consideration, and in which the result of the surgeon's reflexions are of more serious importance than the treatment of hernia; for ourselves at least we can safely assert that we scarcely ever saw a case in which we did not learn something, or in which some interesting or novel point did not occur to strengthen or modify the opinions we had seriously formed. The most important point however in the whole subject is the conviction on our minds of the propriety of operating at an early period of strangulation; often have we seen a patient sink under the disease for want of an operation, either from the ignorance or timidity of the practitioner, but it is very seldom indeed that we have witnessed the death of the patient purely from the operation having been performed. Even in the practice of hospitals we can ourselves recollect a complete change in the treatment of these cases, most of which when presented at the hospital are already of considerable standing, and yet when we began our studies we can recollect repeated consultations being

held upon them after admission, before recourse was had to an operation; now on the contrary, if fair trials had been made beforehand, or if the strangulation has already lasted some time, no time is lost in what are then most probably only fruitless attempts at reduction, but the surgeon at once proceeds to the certain relief afforded by the operation; and nothing can be more striking than the comparative result of such cases. How little the system is affected by the operation when performed soon, the following case will shew.

1. *Strangulated Hernia—operation early.*

Charlotte Kitter, æt. 34, admitted Feb. 19th, 1834. Catamenia present. Has had femoral hernia for some years, reducible till 10 o'clock, a. m., after which attempts were made to reduce it without success, and in the evening she was sent to the hospital. There was a femoral hernia of some size, turning over Poupart's ligament, very hard and firm at the ring, and the tumor itself tender and painful. The chief circumstance Mr. Hawkins said, in his opinion, to be attended to in strangulated hernia, is the state of that part of the protruded bowel or omentum which is *embraced by the sac*, for if that portion is very hard and tender, it is not very likely to be reduced, and the part below may be quite flaccid and unattended with pain, although mortification may be going on; a portion of tightly strangulated bowel being defended by omentum or by a quantity of fluid in the sac below the ring. For this reason Mr. H. thought it right in this case to proceed at once to the operation, without further trials to reduce it, which was done about twelve hours after the strangulation. The sac contained about five inches of intestine, which was dark coloured, but quickly recovered its proper circulation when the stricture was divided, which was very broad and tight. After the bowel was returned a large quantity of serous fluid came down from the abdomen. She was then left quiet for the night.

20th. An injection was given, and afterwards three doses of Epsom salts

and infusion of roses, and the bowels still continuing confined, three grains of calomel, followed by some castor oil, were also given. In the evening the bowels had been freely open, and no pain whatever was felt.

22. Beef-tea was given, and the next day fish, the patient not having had a single bad symptom. On dressing the wound it was found to have almost united by the first intention. A small portion of skin, however, near the incision, looked as if it was going to slough from the force used in the taxis, which did actually take place. The patient however quickly got well.

2. *Incarcerated Omental Hernia—no operation.*

But while strangulated hernia cannot be operated on too soon, there are frequently occasions for the exercise of judgment on the part of the surgeon in determining whether strangulation is actually present or not. An old and large intestinal hernia for instance frequently causes attacks of severe pain, constipation, tenderness of the tumor, sickness and vomiting, and yet no operation may be necessary in such case, the bowel being merely *incarcerated*, i.e. its functions impaired by its confinement, (generally from some imprudence in diet,) and yet the stricture not being tight enough to endanger the circulation in the protruded viscera; in which case the symptoms may be combated by appropriate means, and the temporary obstruction overcome. It is in cases of this description too that the operation becomes really dangerous, from the size of the tumor, and from the adhesion generally formed, and hence the propriety of that line of practice recently again recommended by Mr. Key, though so often lost sight of, viz. when strangulation actually takes place, to divide the stricture without opening the sac. With omental hernia again, although an operation is sometimes as urgently required as for intestinal hernia, yet there is no doubt that as a general rule more room is afforded for the trial of such means as may succeed in removing the effects of the stricture without an operation. There is danger, indeed,

of a portion of bowel being concealed in a mass of omentum, so that if from the *symptoms* there appears reason to fear such an occurrence, the surgeon should not trust to the feeling only of the tumor, but rather operate unnecessarily than incur the risk arising from delay; if, on the other hand, the symptoms are mild, he may wait till more urgent necessity for operation arises, and so perhaps avoid it altogether.

Ann Tenison was admitted under the care of Mr. Hawkins, Nov. 15th, 1833, with femoral hernia. She had had rupture for six months, and the present tumor has continued down for the last fortnight, producing no pain or inconvenience till four days ago, when symptoms like the present came on, and after a few hours suffering again left her; they returned, however, a second time, last night. The tumor is not very large, it is moveable and circumscribed, somewhat elastic, and has a large gland over it; it receives a slight impulse on coughing; is very tender, and painful even when not handled,—she has also a good deal of pain in the back and around the umbilicus. The bowels have been open since the tumor has been down, and she has no sickness;—tongue white—pulse not very quick.

On her first admission she was placed in a warm bath, and had 20 ozs. of blood taken from the arm, and an unsuccessful attempt was made to reduce the tumor. Mr. Hawkins saw her in the middle of the day, and thought that the tumor was omental only—that the stricture was not very tight, from a slight impulse being still perceptible on coughing—that it was incarcerated, and not strangulated, and consequently that an operation would probably not be necessary; in which opinion the other surgeons who were in the hospital concurred.

A dozen leeches were applied over the tumor, an injection administered, and some aperient medicines given by the mouth. By this treatment the pain was reduced, and the bowels acted upon several times; she slept well during the night, and had no return of symptoms, and in a few days she was order-

ed to wear a truss upon the tumor, with a not very forcible spring, and the pad not so convex as usual.

3. *Wearing a Truss upon an irreducible Hernia.*

In speaking of the propriety of wearing a truss over the omentum in the case just related, Mr. Hawkins said that if care was taken not to use too great pressure, nor at first to continue it for too long a time at once, there was no danger of producing inflammation or other mischief in the part, and that the truss served effectually to prevent further protrusion, even if it did not succeed in reducing the hernia altogether. He then related the following case to shew that the same treatment was also applicable to intestinal hernia, and being an interesting one, we preserved notes of the account. A young gentleman, about 13 years of age, was under the care of a physician for some time, in consequence of great disturbance of the bowels, and consequent derangement of the whole system, the cause of which was not evident till the boy complained of pain on one side of the abdomen, when it was clear that the testes had not yet reached the scrotum, and the pain was found to be just above the ring on one side. I was then asked to see him, and ascertained that without having come through the external ring, there was an effort to protrude on the least coughing or other exertion, the bowel apparently filling the inguinal canal on both sides. I then directed a double truss to be worn not pressing upon the external ring, where the testis would have been compressed, but having a broad pad bearing upon the course of the inguinal canal. The boy immediately improved in health, and after wearing the truss for about a year, the testes had reached the scrotum, and the incipient double inguinal hernia was completely cured. Something of the same kind as this Mr. Hawkins said was very common about the time of puberty, but the same boy was about a year afterwards an example of a circumstance which is comparatively very rare. He was observed to have very great irregularity in the action of the

bowels, which were sometimes obstinately constipated for several days together, resisting the strongest purgatives, and only yielding at last to repeated doses of castor oil; the attack of constipation being frequently succeeded by diarrhœa for some time, during which time the evacuations frequently shewed a good deal of blood. Being under the care of the same physician, he frequently examined the abdomen, and I also saw him with the same object, but it was evident that there was nothing now wrong in the inguinal canals, and no complaint was made which led us to suppose that any other hernia existed to account for the severe symptoms he occasionally laboured under, and which had a good deal affected his health. At last, however, he fortunately received an accidental kick in the groin from a child, which drew attention to this part, and then a very small body was felt quite deep under Poupart's ligament, which was soft and slightly tender, and in which it seemed that our patient had occasionally heard something like the noise of air. This immediately excited our attention, as perhaps a femoral hernia, although, if so, it must be a very small portion of one side only of the bowel, not including the whole calibre of the canal, and scarcely equalling a common gland in size, and therefore, as it seemed, scarcely sufficient to account for the symptoms he had laboured under for several weeks, as no pain whatever had been felt in this part. Mr. Brodie also saw him with me, and said that he had never seen anything of the kind before. We agreed, however, that he should wear a slight truss over the part for some time. The effect of this was quite surprising, for the action of the bowels directly became regular and the health better; in a short time, nothing could be felt in the part, and he soon after left off the truss without having since had any return of similar symptoms.

4. *Rupture of Intestine by a Blow upon a Hernia.*

The records of forensic medicine possess more than one such case as the

following, and shew the danger of leaving a hernia unreduced, and unprotected by a truss, however common such carelessness unfortunately is in all classes of life.

Henry French, *æt.* 55, admitted Jan. 11th 1834, under the care of Mr. Hawkins. This man had been leading a horse drawing a cart, when the animal took fright, and ran against some iron railings, by which means he was squeezed between the railings and the wheel. He had slight scalp-wounds in one or two places, and a severe contusion of one arm; but what he chiefly complained of was severe pain in the abdomen, especially on the right side, where there was an inguinal hernia, that he thinks was down at the time of the injury, and which came down also several times after his admission. There was no great anxiety or collapse when first seen, the pulse was 84, full and soft. Leeches were applied to the part, and saline and antimonial medicine ordered. The next day he seemed pretty comfortable, and said he was relieved by the leeches, though there was still some tenderness. Leeches repeated, with aperient medicine, as the bowels were not open. Pulse 90 and small. In the evening he felt better, though some distension of the bowels was perceived. Between 12 and 1 o'clock the house-surgeon was called up to him, and found him in very great pain over the whole abdomen, with exquisite tenderness to the least pressure—constant retching, much distention of the abdomen—the skin cold, and the pulse hardly perceptible;—in short, the most acute peritonitis had evidently come on. He continued much in the same state till about three, when he aroused himself, and asked for some warm gruel to drink, but before the nurse could procure it he had fallen back, and expired about forty hours after the injury.

On examination the next day, nothing was found in the hernial sac, but in the right iliac fossa a portion of small intestine was seen in a cavity formed by adhesion from recent lymph, and inclosing a quantity of lymph and pus and a little fecal matter;—the bowel was slightly ecchymosed, and a small

rupture of its coats was seen about one-third of an inch in length. The whole peritoneum was inflamed and coated with lymph.

The hernial sac presented a curious complication, that in an operation might have caused some difficulty. Below the sac was a hydrocele, and behind the sac a large varicocele, and in front of it was a fatty tumor about $2\frac{1}{2}$ inches long, and surrounded by a smooth cyst, in which it lay loose like a portion of omentum in a hernial sac; so much so indeed, that it was thought at first there must have been a double hernia.

5. *Hernia produced by a Blow.*

William Cooper, *æt.* 20, admitted July 29th, 1834, under Mr. Hawkins, with the following history. He said that a fortnight before, a person had kicked him on the groin and scrotum, and driven the testicle up into the abdominal ring, whence it did not return for an hour, and that then a rupture had come down with it; that the bowel was supposed by his medical attendant to have been slightly strangulated at first, as it did not go up again for two days, during which time he had a good deal of pain, and complete constipation, and that he had had much pain in the abdomen since that time. There had been no swelling whatever of the testis, so that a mistake as to the nature of the case could not have been made as to this point, and he said that whenever he walked since the accident the rupture had come down with some pain, and receded again on his lying down. On his admission there was a good deal of tenderness of the abdomen, especially on the right side, but without any hernial protrusion. This pain was increased by exertion, especially when he made water, which he did with more difficulty than usual—the spermatic cord seemed full and tender, but the testis was healthy. He had also some degree of fever.

A calomel purgative with castor-oil was given, and some leeches applied to the abdomen, by which he was somewhat relieved.

Sept. 1. Some pain complained of chiefly in the epigastrium—feverishness

lessened.—Purgative and leeches repeated.

2d. Not able to make water at all, and the catheter drew off a small quantity of dark coloured water. Calomel purgative repeated.

3d. Not much pain—pulse returned to its natural state. Sickness and uneasiness in the epigastrium, with some bilious vomiting. Effervescing saline draughts. Calomel half a grain, and opium half a grain, to be taken night and morning.

7th. Some return of pain, and considerable nervous anxiety—no fever—leeches repeated.

8th. Pain all gone.

13th. No pain in any part. The hernia has not been down since his admission. Reported cured.

Treatment after Operation for Hernia.

There is much more room for surgical skill than is usually imagined after the operation for hernia, for it is by no means an universal rule that inflammation is the chief danger to be guarded against. No doubt the effects of the stricture or of the stricture and the operation together are very often to produce rapid and fatal inflammation of the peritoneum, but we are sure that we have seen some patients sink after the operation, in whom not a trace of inflammation has been present, and who might probably have been saved by a different line of practice to that which we saw adopted. We recollect some years ago two very instructive cases which we saw under Mr. Hawkins's care, an account of which will be found in the *Medical Gazette*, Vol. VI., p. 927, both of which were probably saved from the immediate effects of the strangulation of several days' duration by being well supported after the operation. These are less common perhaps than cases in which there is a mixture of chronic inflammation with constitutional debility or irritation. The different practice to be adopted according to the variation of symptoms in such cases is of material importance therefore; and as it is a point to which Mr. Hawkins often directs the attention of the pupils, we

have selected the following cases to illustrate some of the circumstances occasionally met with.

6. Operation followed by great Debility and Irritation.

Susan Dixon, æt. 44, admitted Oct. 22d, 1833, under the care of Mr. Hawkins, with a femoral hernia of some size, turning upwards over Poupart's ligament. She states that she has suffered from a rupture for 13 years, during which time she has never worn a truss; she has never been without a swelling in the groin, which has increased after any exertion, and she has suffered from frequent "bilious attacks." A year ago the rupture was strangulated, though without such severe symptoms as at present, and at that time the tumor was larger than it now is. She was seized with the present attack while scouring the floor on Saturday morning the 19th, (three days and a half ago,) since which time pain in the bowels, vomiting, and excessive languor have continued almost without intermission till her reception in the hospital. During this time she was treated for inflammation of the bowels, with 40 leeches, purgative medicines, and a large blister!—the hernia not having been discovered till this morning. On her admission she complained of great tenderness on the tumor and in the abdomen, especially in the part immediately around the tumour;—there is very distressing and constant vomiting of dark brown substance, partly fecal in smell;—the countenance sunk and sallow, and with an expression of great weakness and anxiety. Bowels not opened since Friday the 18th—tongue white and furred—pulse quick and weak.

The patient was kept in a warm-bath for a considerable time, but without a reduction being effected; Mr. Hawkins therefore proceeded to an operation.—The steps of the operation were remarkable for the quantity of fluid contained in the fascia propria, and its exact resemblance to a hernial sac, especially as the real sac was so exceedingly thin and transparent, that when the fascia was opened and the fluid let out, it

looked like the immediate peritoneal investment of the bowel. So distinctly was this part seen through the sac that many spectators thought the operator was cutting into the bowel, especially as it was some little time before Mr. Hawkins could satisfy himself of the exact nature of the parts, a great number of serous bands at the reflexion of the fascia propria adding still farther to the obscurity, as they looked exactly like adhesions between the bowel and the hernial sac, for there was no distinction in appearance between the outer surface of the real sac, and the inner surface of the fascia propria, both being as smooth as any serous membrane. When the real sac was finally opened, three or four inches of bowel were seen, which was very dark, softened, and ecchymosed, especially where the two folds of intestine were embraced by the stricture; the bowel being pulled down after the division of the stricture to examine its appearance, which shewed very strikingly the changes produced by the stricture on the part below.

23d. The operation being performed in the evening, she was left quiet during the night, and in the morning an injection was administered, which brought away a good deal of fæces. The sickness was instantly removed by the operation, and had not returned. Pulse fuller but weak and slow, and intermits every 20th beat.

Some beef-tea allowed.

R. *Calomel*, gr. iij. *statim*.

Mag. sulph. ʒij. *Aquæ menth.*
pip. ʒiiss. *M. 4tis horis sum.*

24th. Streaks of blood in the evacuations procured by the medicine, which Mr. Hawkins said he had several times seen where the bowel was much injured by strangulation, and he recollected one case in which more than a pint at a time had thus come away, the patient however ultimately getting well. The pulse is more slow, and intermits much more frequently. The water requires occasionally to be drawn off by the catheter. Abdomen tender and full, as if from flatulence.

To take a little white wine, and some brandy occasionally in water and with arrow-root,

R. *Sp. æther. nitros.* ʒj. *Mist camph.*
3x. M. 6tis horis.

Vespere. Feels stronger and better, but complains much of flatulence, amounting almost to tympanitis. P. intermits less frequently.

Ordered a large poultice of chamomile flowels in hot water, which gave great relief to the abdomen.

25th. Bowels open, a little blood still coming away. Tympanitis continues, by which the abdomen is rendered of great size. Pain and tenderness however less. P. stronger and fuller, and not at all intermittent. Tongue clean. Countenance less anxious. Mr. Hawkins ordered her to lie upon her side, which assisted in some measure in expelling the wind. Some relief was also given by the introduction of a large catheter into the rectum, through which some wind came away, which the sphincter otherwise retained. Most relief, however, was subsequently given by binding a broad flannel bandage pretty tightly round the abdomen. The wound dressed and looking healthy, though suppurating in part.

R. *Haust. salin. ammoniat.* ʒiiss.—

Træ. opii, ʒj. v. *M. 6tis horis.*

27th. Better—bowels open—pulse stronger—tongue clean.

28th. Sickness last night, otherwise much the same. Tympanitis a little less. Bowels not open, and some solid fæces felt in the colon.

R. *Ol. ricini*, ʒj.

Rep. pil. calomel, hss.

30th. Still a good deal of pain in the abdomen occasionally, to which a mustard poultice is frequently applied with advantage for a few minutes at a time. Wound opened again partly in consequence of suppuration.

Nov. 5th. She has gradually improved, and feels nearly as well as before the strangulation, being still however very weak and languid.

She has continued her wine and brandy, and as much food as she can take.

R. *Infus. cascar.* ʒiiss. *Acid sulph.*
dil. ʒlvj. *Tr. gent. c.* ʒss. *M. ter die.*

A sinus afterwards formed to some distance from the wound, which required

to be laid open, but on the 28th she went out cured.

7. Operation twice performed—Mortification of Bowel—severe Symptoms by Separation of Slough?

James Wheatley, æt. 46, admitted July 21st, 1831, with strangulated hernia, for which he had worn a truss since he had been operated on by Mr. Hawkins for the same hernia, about a year ago; but he had allowed the rupture to come down occasionally, and it had not gone up again since Monday (three days ago), when after some exertion, following a hearty meal of potatoes, a large portion of bowel had descended. Vomiting came on two hours afterwards, and had continued till the present time, and hiccough yesterday.

He complains now of violent griping pains in the abdomen—constant retching and vomiting of stercoraceous matter, with occasional hiccough. Abdomen tender around the hernia, and still more in the epigastrium, which is the chief seat of his pain—no motion since Monday—countenance anxious—pulse 76.

He at first refused to have the operation performed, but submitted in the afternoon, after ice had been applied for some time. Mr. Hawkins performed the operation with some care, in consequence of the former operation, and found the intestine in contact with the fascia, the peritoneal sac having been obliterated in front by the previous incision, so that, in the lower part of the sac, the bowel was closely adherent to the common integument. The intestine consisted of about five inches of the smaller bowel—it was of a bright red colour, from inflammation, and thickly coated with recent lymph, and, upon separating the adhesions, a spot, of the size of a shilling, was seen to be quite black, looking like coagulated blood, and without any glossiness, and the coats of the bowel very thin. After a little consideration, Mr. Hawkins returned it into the abdomen observing that the mortification of so small a portion could often be effected within the abdomen, so that the slough separated into the canal, and a better line was pre-

sented than if the surgeon was to open the bowel, and leave an artificial anus; and that, if the requisite adhesions did not take place for this object, still it was generally found that the mortified spot remained at the internal ring, and, consequently, that the fæces did not necessarily become extravasated into the abdomen, but could very often come away by the wound; the case demanding great attention, however, about the period when the slough would probably separate.

The vomiting, and hiccough, and pain continued after the operation; and, about four hours afterwards, 20 leeches were applied (fomentations not appearing to give any relief), and the following mixture—

R. *Magn. sulph.* ʒjss. *Acid. sulph. dil.* ʒiʒ. *Aq. menth. viridis*, ʒjss.
M. ft. haust. 2dis horis sumend.

26th, 8, a.m. Tongue more dry—pulse 86, weaker—bowels just opened twice, the evacuations being very dark and fetid.

1, p.m. All pain and tenderness gone—hiccough continues—pulse very low.

Allowed beef-tea and arrow-root in small quantities. Ordered to continue the draught, and, in the evening, to have an injection of gruel, and to take some pills, with *Calomel*, gr. iij. and *Pil. sapon.*, ʒi *Opio*, gr. v.

23d. More comfortable. Pulse a little stronger—bowels not at all free.

Contr. Haust.

24th. Tongue clean and moist—no pain or tenderness—complains only of hunger, but Mr. Hawkins allowed no solid food.

25th. Wound dressed, and found almost wholly united by the first intention.

27th. Some heat of skin—bowels very little open. Complains of griping pain.

Appl. fofus papav. *Contr. haust.*

29th (8th day). Quite comfortable till this morning, about 1 o'clock, when he was attacked suddenly with violent pain and tenderness in the abdomen—constant vomiting, which soon became stercoraceous—tongue dry—pulse very small and rapid—great flatulence complained of.

An injection was given, which brought away no *fæces*—his mixture was repeated every two hours, and the abdomen fomented, without relief.

10, a.m. Symptoms increasing.

Appl. Hirud. xxv. abdomini.

1, p.m. Mr. Hawkins saw him, and found the symptoms not relieved by the leeches. Abdomen, quite tympanitic—very anxious.

V.S. ad 3xij.

R. Calomel, gr. v. Opii, gr. j. M. statim.

R. Aquæ menth. pip. ʒjss. Sodæ tartrat. ʒij. Magnesiae, ʒss. M. 2dis horis donec alvus respond.

6, p.m. *Calomel, gr. v.*

10, p.m. Pain lessened considerably—has just had a copious motion—the retching and hiccough continue—pulse small and fluttering—extremities cold—surface of body bathed in cold perspiration.

Appl. Empl lyttæ magn. abdom.

R. Calomel, gr. iij. Opii, gr. ij. stat.

30th. Has a good deal rallied. The extremities began to get warm soon after the application of the blister. Skin now moist and warm—vomiting—pain and tenderness ceased—bowels discharging chiefly secretions without *fæces*.

Contr. Haust. aper. salin.

Repr. Pil. resp.

31st. *Repr. Pil. et Haust.*

August 2d. Has very much improved, but has had several returns of vomiting and pain to a slight extent—bowels not free.

R. Pil. hydrarg. gr. iv. Pil. sapon. ʒ Opi, gr. iij. Extr. coloc. comp. gr. v. M. o. n. s.

R. Olei ricini, ʒss. mane sequente. Beef-tea, &c.

5th. Was again attacked this morning with vomiting and griping, without pain.

R. Calomel, gr. iij. P. opii, gr. j. M. statim.

Enema terebinth.

1, p.m. Vomits *stercoraceous* matter—tongue dry—hiccough—not much pain.

Repr. Pil. Cal. et Opii, statim et h. s.

Vespere. Symptoms continue—extremities cold.

Vini albi. ʒij. Calomel, gr. iij. ʒ P. scam, gr. ij. statim.

Olei ricini ʒss. mane.

6th. Vomiting continues. Evacuations not fatal for some time—surface still cold.

Vini, ʒiv. Ova.

Empl. lyttæ abdominis, et postea Ung. hydrarg.

7th. Beginning to rally a little—vomiting continues. *Burnt brandy, ʒiv.*

9th. Going on well. Continues his wine and brandy, and allowed also some porter.

13th. Going on well till to-day, when some griping returned, with vomiting, and again on the 20th, at which time the abdomen was very much swollen and tympanitic.

It is unnecessary, however to detail the rest of the case, as it went on nearly in the same way for some time longer, before he was finally cured; during which time the treatment of the case was nearly the same—supporting the general strength, whilst the action of the bowel was restored by calomel and opium, and purgatives, &c.

Mr. Hawkins attributed the symptoms to the separation of a slough from the bowel, by which inflammation was produced, with a great deal of irritation and disturbance of the functions of the bowels from the consequent narrowing of the canal at that part.

LONDON DISPENSARY.

BEST MODE OF TREATING MAMMARY ABSCESS.

Mr. Robinson has communicated six cases of mammary abscess to the Medical Gazette,* for the purpose of displaying its history and treatment. We presume that the greater number of our readers are tolerably familiar with the former—that few need be informed of the occurrence of common abscess in the breast, as in any other organ or tissue—and that it is not necessary to

describe at any length the mode in which obstruction of the lactiferous ducts may occasion inflammation, supuration, ulceration of the integuments, and fistulæ.

The question which has been disputed in reference to the surgical treatment of this complaint, is the propriety or otherwise of an early opening. Mr. Robinson's observations on this head are not very copious nor precise. They are as follow.

"The third case proves, that where the abscess is owing to distention of the lactiferous tubes, the formation of fistulæ may sometimes be prevented.

The fourth case shews the result of opening by the lancet, and opening spontaneously. The former plan will generally be found the best, especially in deep-seated abscess. In this case the opening made by nature was large, and the contents of the abscess were evacuated all at once, which is more favourable than usual; for generally the opening is no larger than a pin's head, and is slow in healing up, the skin being commonly much destroyed before it gives way. Even in this case that abscess was much longer in opening, and more painful, which burst spontaneously, than that which was opened by the lancet.

The fifth case more forcibly proves that the artificial opening is preferable to the opening by nature; for the first abscess being opened by the lancet, was healed in three days; whereas that which broke of itself was much slower in healing, and was slightly fistulous.

This also points out the necessity of watching these cases: the woman was desired to call on me the following day, instead of which she allowed three days to elapse; otherwise I believe the fistulæ would have been altogether prevented.

The sixth case shews this disease in its most distressing and tedious form: the breasts were permitted to become over-distended with milk; both breasts were inflamed throughout; numerous abscesses, implicating the lactiferous tubes, followed; and she suffered severely for ten weeks.

The two last cases prove the great

advantage of pressure (after the inflammatory stage is gone off,) in obliterating fistulous canals—a plan which will in many instances prevent, if it does not altogether supersede, the necessity of extensively laying open the breast, a custom which used to be resorted to formerly for the cure of sinuses, and which is even in the present day, I believe, occasionally adopted."

These remarks embody little more than the usual recommendations and the common practice. The most annoying circumstance connected with abscess of the mamma is the disposition to separate processes of suppuration, or, rather, to the formation and collection of matter in several portions of the same breast. They redound in some degree to the discredit of the surgeon, and form a serious source of distress to the patient.

It has been noticed in cases of diseased absorbent glands, and even in abscess of the cellular tissue, that suppuration does not always form in a single point, nor appear at the commencement inclosed in a single cavity. On the contrary, it has been found that it sometimes begins in several distinct portions of a gland, and that some time elapses before one common abscess is produced. The practical rule has been deduced, to wait till such a collection has occurred before an artificial opening is resorted to. If the surgeon operates too early, he has to open in succession several abscesses instead of one.

Our own opinion is, that the fact should always be remembered by the surgeon, and that by it his practice should be mainly guided. Yet we think that too much stress has been laid upon the one, and that the other has been carried rather too far. In cases of venereal bubo, if the surgeon declines to open the abscess until a large suppurating cavity is formed, he will probably endanger the vitality of the integument, and certainly protract to an unnecessary extent the duration of the complaint. Our readers will find more detailed observations on the management of suppurating bubo in another place.

We suspect that the cases of mammary abscess and suppuration in a strumous or venereal gland are not altogether analogous. In the instance of the gland its whole texture is diseased, and will probably be invaded throughout by suppuration. But the mamma is differently circumstanced. The lactiferous tubes are obstructed in one part — distention, inflammation, and suppuration in that part are the result,—and there appears to be no necessity why other portions of the gland should be involved. That they are so will probably be found to depend upon another cause. The gland is composed of numerous lobules, with a plexus of cellular tissue interposed. Inflammation occurring in one part of the gland may readily extend along the cellular processes to another. The same thing would seem not unlikely to ensue, if matter were confined, or if it had not a free exit: and such is actually the case.

If these considerations are correct, an early opening of a mammary abscess is desirable. We are convinced, for our own parts, that it is so. We have treated many cases of this complaint, and were at first annoyed, as all surgeons have been, by repeated suppurations and ulterior sinuses. It appeared to us that these depended on a simple opening not sufficiently evacuating the abscess. After some practical experiments we adopted the following plan with much success.

Having satisfied ourselves that suppuration was actually established, we made with a lancet as dependent an opening as circumstances would admit, a vertical puncture being generally preferable to a horizontal one. We then introduced a probe into the cavity of the abscess, and ascertained if any sinus extended from it to another portion of the breast—or if the point of the probe could be made to project beneath the skin, in a more dependent spot than the puncture. If either was the case we cut on the extremity of the instrument, made its point project through the incision, tied around it a narrow piece of tape, or a silk ligature, withdrew the probe, and thus establish-

ed a small seton between the opening originally made and that obtained by cutting on the probe, at the most dependent portion of the abscess. If more than one sinus extended from the latter, or if its formation or situation was such that one dependent opening was insufficient to empty it completely and at once, another incision was made upon the probe in the requisite direction, and another seton passed in the same manner as the former. The whole should be done at one operation, and since we have adopted this method of management, we have not been annoyed by repetitions of abscesses or formations of sinuses. We have found it in fact a great improvement in the treatment of this painful and troublesome affection. The operation is rather more severe at the time, but when once performed, it prevents the necessity in almost every instance for others. A patient will go through one with fortitude, but her spirits are broken and her strength of mind is shaken by its frequent repetition.

DR. STOKES' LECTURES ON CEREBRAL DISEASES.*

Neuroses—Encephalitis—partial Cerebritis—Phrenology.

Dr. Stokes has made many judicious observations and reflections on that mysterious class of diseases termed the neuroses. Those who look merely to affections of the brain and spinal marrow, as constituting the neuroses, take a very limited view of the subject. The nervous influence pervades every structure in the body, and deranges as well as presides over every function. In every disease, however structural or even mechanical, we may be assured that the nervous system of the part or the whole is affected.

“If we take, for instance, a case of gastritis, or hepatitis, we find a lesion of function in the nerves of the respec-

* London Med. and Surg. Journal Nos. 124, 125.

tive organs, which, in certain cases, seems local, but if the inflammation be intense and the fever high, we have superadded to this a sympathetic affection of the brain, or spinal cord. The same thing applies to all forms of local disease, for in all there is an affection of the nerves, either confined to the suffering organ, or extending to the whole system."

We find that affections of the cerebro-spinal system of nerves differ very materially from those of the ganglionic nerves. Most terrific and fatal diseases of the medulla spinalis may occur, without any disturbance of the mental functions; but these last seldom remain unaffected when the brain, especially its surfaces, become diseased.

"To follow up this point, suppose we take the diseases of the brain itself as compared with each other; we find that their symptoms vary according to the locality, so that whether we look to physiology or pathology we must consider the brain as consisting of several distinct parts, and not as an inseparable whole. It is admitted by many writers of high authority, that there is a difference between the symptoms of disease affecting the periphery, and disease affecting the central parts of the brain; and there is reason to believe, that we may be able in many cases to diagnose affections not only of the centre and periphery of the cerebrum, but even of other parts of the organ."

This is rational doctrine, and although it may be ridiculed by the antiphrenologists, as auscultation was by the anti-stethoscopists, we are convinced that the doctrine will gain ground as pathology advances.

Although there are several organic affections of the spinal marrow attended by pretty regular symptoms, and by which they may generally be recognized, yet, unfortunately for the practitioner and pathologist, there is a host of other nervous disorders, unconnected with any appreciable change of structure in the nerves or the nervous centres.—Epilepsy, tetanus, hydrophobia, chorea, and hundreds of other complaints, for which we have not even names, present

themselves to the memory of the practitioner, and remind him that he has no insight into their pathology. They are lesions of function—the organic cause, if any, being unknown!

"No one can deny that neuroses are very different from organic diseases of parts. If we compare them with that class which is most familiar to us,—the inflammatory affections, we find a remarkable difference. In the first place, the neuroses may be brought on by causes not reckoned among those commonly capable of exciting inflammation. In the next place, their invasion is sudden, and their progress rapid; they arrive at their acmé in a very short period of time, and subside rapidly. These are characters which do not belong to the ordinary forms of organic disease. Again, we often observe the utmost intensity of nervous pain without the co-existence of swelling, redness, or heat, of the part affected. We find, too, that they are not to be subdued by the antiphlogistic plan: on the contrary, several of them are either relieved or cured by an exactly opposite line of practice; and many cases which would appear to demand the lancet are known by long experience to be most benefitted by stimulants. Lastly, the most accurate and well-conducted investigations of pathological anatomy have failed in demonstrating the slightest organic change in these cases,—at least, where changes are found, these are *neither constant, competent, nor commensurate with symptoms*; so that whether we compare the information we derive from symptoms, or the result of pathological anatomy, we find a great difference between neuroses and organic diseases. It may be said, that though they are not inflammatory affections, they have some resemblance to them. This, however, is only a gratuitous supposition; for even in the very worst cases they present nothing analogous to the result of inflammation, and the brain and spinal cord are as free from perceptible organic change in the majority of cases of fatal tetanus and hydrophobia, as they would be in nervous affections of a slight and transient character."

Dr. Stokes proceeds to the consider-

ation of—1st, local inflammation of the brain—2d, general phlogosis—3d, mere sanguineous congestion—4th, apoplexy—5th, paralysis.

Our author believes that inflammation of the membranes of the brain may be sometimes distinguished from phlogosis of a portion of the cerebral substance: but when the whole substance of the brain is inflamed, our means of diagnosis fail. The distinction, however, is not of very material importance, in a therapeutical point of view. We pray attention to the following extract.

"If we inquire what are the symptoms of membranous inflammation of the brain, as laid down in books, we shall find them to be the following:—pain, delirium, convulsions, alteration of sensibility and coma. These are the symptoms which are generally given as characteristic of arachnitis; and it is quite true that they are observed in many cases of the kind. But the person must be dull indeed who thinks that such symptoms imply nothing more than an inflammatory affection of the membranes of the brain. Take for instance one of the most prominent symptoms—delirium; what does this imply? that the portion of the brain which discharges the functions of intelligence or mind has been injured, and is rendered incapable of performing its office. No one will venture to assert that the membranes of the brain are the organs of thought, and that the delirium proceeds from *their* morbid condition; such a notion as this could not be entertained for a moment. What then are we to suppose? One of these two things—either that there must be inflammation of the substance as well as of the membranes, or that the substance of the brain must be affected in a neurotic manner without any actual inflammation. As far as delirium is concerned, it appears to me to be quite impossible to distinguish between inflammation of the brain generally, and of its membranes. The same rule applies to the other symptoms, convulsions, alteration of sensibility, and coma. I repeat, that all we can say on this subject is, that in such cases there is either inflammation of the substance as well as the

membranes of the brain, or that, with the membranous inflammation, there is a neurotic condition of the substance of the brain. Yet who, in such cases, can affirm with certainty that the symptoms of derangement of the substance of the brain are merely neurotic, when inflammation is admitted to exist within the cranium, and when we know that the two inflammations commonly co-exist?

The fact of delirium occurring so frequently in inflammation of the membranes of the brain, is of considerable importance, as showing, not that membranes of the brain have anything to do with intelligence, but as supporting the opinions of those who believe the periphery of the brain to be the seat of the intellectual faculties, and here is a fact which, as far as it goes, is in favour of the doctrines of phrenology. If we compare those cases of cerebral disease in which there is delirium, with those in which it does not occur, we shall find that it is most common in cases where disease attacks the periphery of the brain, as in arachnitis. The cases in which we observe great lesions of the brain without delirium, are generally cases of deep-seated inflammation of a local nature, or inflammation of those portions of the brain which the phrenologists consider not to be subservient to the production of mental phenomena. This fact, also, would seem to confirm the truth of the opinion of the difference in function between the medullary and cortical parts of the brain. It is supposed that the cortical part of the brain is the organ of intelligence, while the medullary portion performs a different function. It is, however, a curious fact, that in delirium the inflammation is generally confined to the surface of the brain, and that in cases of deep-seated inflammation, the most important symptoms are those which are derived from the sympathetic affections of the muscular system."

The foregoing remarks are very rational, and indicate the deep thinker, as well as the observant practitioner. When a portion of the brain, as in apoplectic effusion, tumors, or other morbid growths irritating the neighbouring

parts, becomes inflamed, we find lesions of function in the muscular system, rather than in the intellect. This is often evinced, at first, by an apparent increase of innervation in certain muscles of the body—hence, pain in some of the muscles of the extremities is often an early symptom of local encephalitis. This is a curious fact, but one which appears to be well established.

“In partial encephalitis, there is often but little, or even no pain in the head, and the only warning we have of the approach of cerebral disease is the occurrence of pain in the extremities, followed by rigidity. Here are the two most prominent symptoms of the disease, pain in the muscles of the extremities, and then rigidity. Further, we have alternate spasms and relaxations of the muscles, in which, however, the power of the flexor muscles ultimately prevails, so that, if the disease be in the fore-arm, it may become permanently flexed on the arm, and the contraction of the fingers is sometimes so great as to drive the nails into the flesh. If it affects the leg, the heel may be pressed against the buttock sometimes so forcibly as to form a sore. As the case proceeds, the limb becomes more fixed in its new position, and every attempt to extend it causes pain. During the prevalence of these symptoms, it frequently happens that the patient does not feel pain in the head, or any diminution of intellectual power. The absence of pain in the part affected may be accounted for by recollecting that it is a general law that all inflammatory affections of deep-seated parts are, to a certain extent, of a comparatively painless character, and we may account for the non-existence of any lesion of the mind, by remembering that the disease is partial, and confined to a portion of the brain which appears to have little or no connexion with the intellectual functions. In cases of this kind, when the muscles of the face are affected, the phenomena are interesting, from their being (*in the first stage*) the reverse of those of apoplexy. The face is drawn *from* the affected side, and the tongue pushed, by the opposite

half of the genio-hyo-glossus muscle, *to* the affected side. This is the spastic stage, when complete disorganization has not yet occurred. But when this happens, then the phenomena of the face are like those of apoplexy, because the opposite muscles, which were in a spasmodic, are now in a paralysed state, so that the face is drawn *to* the affected side, and the tongue pushed *from* it, by the healthy action of muscles which are deprived of their antagonists.”

In partial or local encephalitis, delirium may not exist, because the part inflamed may not be employed in the exercise of the mental functions—or because the corresponding part in the other hemisphere may be unaffected.

The next stage of encephalitis is that in which the structure breaks down, as it were, and softens into a kind of matter. In this stage, a train of symptoms very different from the former set obtain. The rigidity and spasm of the muscles diminish, and are succeeded by a paralytic and flaccid state—voluntary motion in one side is lost. In the first stage (irritation or inflammation), a cure may be expected:—In the second, it is impossible.

“In the partial inflammation of the substance of the brain, sensation is variously altered. In some cases motion is lost, while sensation remains intact: in others, sensation is partially or wholly abolished. In many instances the intellectual powers remain in all their integrity, or but little impaired, even after the occurrence of symptoms which mark the softening down of the substance of the brain, and its conversion into purulent matter. In a few there is, during the first stage of the disease, a slight alteration in the state of the intellect, marked by a certain degree of excitement or exaltation of the mental faculties, and this, on the supervention of the second stage, is exchanged for a stage of depression. In fact, the morbid phenomena of the mind and of the muscular system, where they co-exist, appear to be regulated by the same laws. Where the disease is extensive, you can easily observe the injury of the mental faculties which accompanies the second stage; the pa-

tient answers slowly when questioned ; his memory is weak and his countenance has a stupid expression. But cases, even of extensive local suppuration, have been described by various authors, in which there was no lesion of the intellectual functions observed. These, however, generally admit of an explanation. Thus, in the cases recorded by Lallemand, the abscesses were situated in the cerebellum, pons Varolii, and other parts which are not supposed to have any connexion with the phenomena of mind. There are several well-authenticated cases of extensive disease, not only of these parts, but even of the substance of the hemispheres, occurring without any appreciable lesion of the intellect. Thus, Mr. O'Halloran gives the case of a man, who, after an injury which destroyed a large portion of the frontal bone, had extensive suppuration of the brain, and lost an enormous quantity of the substance of one of the hemispheres, and yet preserved his intellect entire up to the moment of his dissolution. There is some difficulty in explaining this. It is an opinion entertained by some physiologists, that, when one hemisphere is diseased, its functions are discharged by the other, and that the brain being a double organ, disease of one side does not impair the functions of the other. But in answer to this, it may be urged, that there are many cases on record, in which disease of a *single hemisphere* has produced great alterations of intellect. The supporters of the former opinion attempt to explain such cases in this way. They state, that in the majority of such cases there was, besides the local encephalitis, inflammation of the arachnoid membrane, and that the lesion of intellect was not so much the effect of local disease of the brain as the result of its complication with an arachnitis engaging the whole periphery of the organ. In the next place, they explain the fact of a *general* affection of the brain, arising from *local* disease, as depending in most cases on the pressure which the tumefied state of the diseased portion necessarily makes on the sound hemisphere; and they state that this

pressure must be very considerable, as the brain, being confined within a bony cavity, has no power of expanding itself. Now it is a most interesting fact, in support of this view, that in a great number of the cases of loss of brain, with preservation of intellect *all through the case*, an extensive opening existed in the bones of the skull, so as to permit of expansion in the diseased hemisphere, and prevent the pressure being exercised on the opposite one. This point appears to be borne out by the result of Mr. O'Halloran's cases, and by many other examples. Lastly, in every acute case of local inflammation of the brain, two causes having a tendency to produce symptoms exist. One of these is the local disease which gives rise to those phenomena of motion and sensation which we observe on the opposite side of the body ; the other is the determination of blood to *the whole brain*, the result of the irritation of that disease.—*'Ubi stimulus ibi humorum affluxus.'*

The arguments of the anti-phrenologists, founded on severe injuries of the brain, without corresponding injury to mental manifestations, are delusive. The instances in the first place, are very rare, and only prove exceptions to the general rule. We sometimes see the stomach a mass of cancer, and yet with the power of digestion. Who would argue from this that the stomach is not the organ of digestion ? The liver will sometimes be burrowed with abscesses, and yet the gall-bladder will be found distended with apparently healthy bile. Would any one infer that the liver is not the secreting organ of bile ? The brain is a double organ, and, though the fusion at the median line is produced by development, yet the symmetrical halves preserve, to a certain degree, their individuality.

"But besides confirming the doctrine, that the brain is the organ of thought, there are innumerable facts drawn from pathology, which have a tendency to prove that particular parts of the brain are the organs of peculiar phenomena. We see an injury of one part of the brain, accompanied by a train of symptoms indicating some pe-

cular lesion of mind ; we see an affection of another part attended by a different class of phenomena. Here pathology, the science which phrenologists reject and despise, goes to establish the ground-work of their doctrines, that the brain consists of a congeries of parts, having each a separate and distinct function. We find, for instance, that disease of one portion of the brain affects the intellect, of another, the generative organs, of a third, the muscular system. What does this prove but that the brain is not a simple organ, but composed of a congeries of parts, each of which governs a different part of the system, or ministers to a peculiar purpose. Now what is this, but what the phrenologists themselves wish to prove ?

Further, the professors of phrenology have placed all their organs on the surface of the brain, and for this they have been loudly censured. Phrenology, it is urged, knows, or professes to know, nothing about the central parts of the brain, which must be equally important with the superficial, and have confined their investigations to the surface alone. Now it is a curious fact, that the pathology, which they deny, in this instance, furnishes the best reply to this objection. I mentioned at my last lecture, that if we examine the symptom of delirium, we find that it characterises the inflammation of the periphery, and is commonly wanting in that of the deep-seated portions. In other words, mental alienation is the characteristic of the disease of that portion of the brain, where the phrenologists have placed the intellectual organs. Here is a strong fact in favour of the doctrines of phrenology, derived from that science, which the mere phrenologist throws overboard and despises. Again, according to the researches of some celebrated French pathologists, there are a number of facts to shew that there is a remarkable difference between the symptoms of arachnitis of the convexity and of the base of the brain. This conclusion, which after a most careful series of investigations was adopted by them, is borne out by the results of my experience, and appears to me to be es-

tablished on the basis of truth. They have discovered that arachnitis of the convexity of the brain is a disease characterised by prominent and violent symptoms, early and marked delirium, intense pain, watchfulness, and irritability. We have first delirium, pain, and sleeplessness, and then coma. But in arachnitis of the base of the brain, the symptoms are of a more latent and insidious character, there is some pain, and the coma is profound, but there is often no delirium. What an important fact for the supporters of phrenology is this, and how strikingly does it prove their absurdity in rejecting the lights derived from pathology ! Here we find the remarkable fact, that inflammation of the arachnoid, investing the base of the brain to which the phrenologists attach comparatively no importance, is commonly unattended with any lesion of the intellectual powers, while the same inflammation on the convexity is almost constantly accompanied by symptoms of distinct mental alienation.

It is objected to the phrenologists, that they know little or nothing of the central parts of the brain, that though these parts may be fairly considered to be of as much importance as any others, still they do not admit them to be organs of intellect. Now, what does pathology teach on this subject ? It shews that we may have most extensive local disease of the central parts of the brain, that we may have inflammation, suppuration, abscess, and apoplexy, without the slightest trace of delirium. Indeed there can be no doubt that the central portions of the brain have functions very different from those on the surface. They appear more connected with another function of animal life, muscular motion and sensation. Then let us examine the phenomena of old age. Every one is familiar with the fact, that when a man arrives at an extreme age, he generally experiences a marked decay of intellectual power, and falls into a state of second childhood. Does pathology throw any light upon this circumstance ? It does ! From a series of ingenious and accurate investigations, conducted by two conti-

mental pathologists, Cauzevielh and Desmoulins, it has been found that a kind of atrophy of the brain takes place in very old persons. According to the researches of Desmoulins it appears, that in persons who have passed the age of seventy, the specific gravity of the brain becomes from a twentieth to a fifteenth less than that of the adult. It has also been proved that this atrophy of the brain is connected with old age, and not, as it might be thought, with general emaciation of the body; for in cases of chronic emaciation from disease in adults, the brain is the last part which is found to atrophy, and it has been suggested that this may explain the continuance of mental powers during the ravages of chronic disease; and also the nervous irritability of patients after acute diseases, in which emaciation has taken place.

I might bring forward many other facts to shew that phrenology is indebted to pathology for some of the strongest arguments in its favour, and I think that those phrenologists who neglect its study, or deny its applicability, are doing a serious injury to the doctrines they seek to establish. The misfortune is that very few medical men have turned their attention to the subject, and that with few exceptions, its supporters and teachers have been persons possessing scarcely any physiological, and no pathological knowledge. Phrenology will never be established as a science until it gets into the hands of scientific medical men, who, to a profound knowledge of physiology, have added all the light derived from pathological research. To give you an instance of the mode of reasoning of the non-medical phrenologists. In their drawing-room exhibitions, they appeal with triumph to the different forms of the skull in the carnivorous and graminivorous animals with respect to the development of destructiveness; and all are horrified at the bump on the tiger's skull. But, as Sir H. Davy well observes, this very protuberance is a part of the general apparatus of the jaw, which requires a more powerful insertion for its muscles in all beasts of prey. Phrenology, as generally

taught, may answer well for the class of dilettantis and blue stockings, or for the purposes of humbug and flattery, but its parent was anatomy, its nurse physiology, and its perfection must be sought for in medicine. The mass of inconsequential reasoning, of special pleading, and of '*false facts*,' with which its professors had encumbered it, must be swept away, and we shall then, I have no doubt, recognise it as the greatest discovery in the science of the moral and physical nature of man that has ever been made. I feel happy, however, in thinking that of late the science has been taken up on its true grounds in Paris, London, and Dublin. Vimont's splendid work on Comparative Phrenology will form an era in the science. In London, Dr. Elliston has directed the energies of his powerful mind to the subject, and in Dublin we have a Phrenological Society, of which Dr. Marsh is the president, and my colleague, Dr. Evanson, the secretary, and under such auspices much is to be expected."

We cannot follow Dr. Stokes through his extensive lectures on the subject of encephalitis; and we have introduced these extracts and observations, chiefly on account of their bearing on phrenology. Dr. S.'s lectures are calculated to repress the prurient imaginings of the phrenologists, and to lessen the inordinate scepticism of the opposers of the new science. We think, indeed, that Dr. Stokes has taken the view of phrenology which every observant physician, and accurate pathologist will come to at last.

MIDDLESEX HOSPITAL.

CASES OF POISONING BY BARYTES, AND THE MINERAL ACIDS.*

Our active contemporary, the Medical Gazette, has published three cases, related by Dr. Wilson at the last *Conversazione* for the present season, held at the College of Physicians. The

* Medical Gazette, July 5th, 1834.

cases in question are instances of poisoning by carbonate of barytes—by nitric, and by sulphuric acid. The first and the last were not fatal, but the second unfortunately was so.

1. *A Case of Poisoning by Carbonate of Barytes.*

A young woman who had fasted for twenty-four hours previously, and who seems to have laboured under some weighty moral depression, half filled a tea-cup with carbonate of barytes, and then filled up the cup with water. She swallowed the whole, in which she discovered no particular taste. Soon afterwards, medicine which occasioned vomiting was given to her.

"On her way to the Middlesex Hospital in the evening, two hours after the event, she found, for the first time, dimness of vision, succeeded by double vision, ringing in the ears, pain in the head, and throbbing in the temples, a sensation of distention, and weight at the epigastrium; she said she felt as if blown up with wind, and complained of palpitations.

When in bed, she first complained of pain in the legs and knees, and cramps in the calves. She vomited twice a fluid like chalk and water, which formed a deposit. Her skin was hot and dry; her face flushed; pulse 80, full and hard. Repeated doses of sulphate of magnesia were given to her.

During the night she had fifteen evacuations; had no sleep, from pain in the head and epigastrium, and ringing in the ears.

The next day she had a hot skin, with profuse perspiration, and slight pain about the pharynx. Her tongue was covered with a white fur, and moist.

A day or two after, the cramps became more severe in all the extremities with a sense of weight, and soreness when touched.

These symptoms, slightly modified, lasted a long time: those which persisted the longest, and which still exist, are severe pains in the head, pain in the left side and epigastrium, great and long-continued palpitations. There

has been much difficulty in persuading her to take any sustenance."

She recovered slowly, and left the hospital in the latter end of June.

Orfila has concluded that pure barytes, or the carbonate, produces death by acting on the nervous system, and that it corrodes the parts it is brought in contact with. Mr. Brodie believes, from experiments with the hydrochlorate of barytes, that death is occasioned by its action on the brain and on the heart. In the case related by Dr. Wilson, the nervous and the circulating systems were disturbed; but the fortunate issue prevented the discovery of the actual lesions, if such there were, which the poison occasioned in the stomach.

The appropriate antidote, or rather the most useful remedy, in poisoning by barytes, is thought to be the sulphate of magnesia. This is founded on the fact, that sulphate of barytes is readily formed, and constitutes an insoluble and inactive compound.

2. *Case of Poisoning by Nitric Acid.*

This case, we perceive, is one which has been previously reported by Mr. Arnott, and was noticed in the 38th Number of this Journal. Perhaps it may be thought that the surgeon and physician have looked upon the fact through different glasses—that the medical features have arrested the attention and engaged the affections of the one, whilst the surgical beauties have subdued the imagination of the other. Yet we see so small an amount of variation in the respective descriptions of the surgeon and physician, that we willingly refer to the narration of the former.

3. *Case of Poisoning by Sulphuric Acid.*

A young woman swallowed some oil of vitriol, and immediately afterwards was constrained to take magnesia. She was then taken to the Middlesex Hospital. She laboured under a constant desire to vomit, and what she threw up was of a dark brown colour. Abbreviation of the following circumstances would be useless.

"Two hours after, her lips began to swell; the pain in the throat and stomach increased, with a violent burning sensation. She had a restless night, with frequent vomiting, and a sensation as if she were going to be choked. Her tongue was covered with a white dense fur, with traces of dark veins, like those of the leaf of a tree; but in vomiting, something like skin was said to have been brought up; since which the tongue has been red. There were scabs forming about the lips, hands, and arms, where the acid had touched them.

During the first four days she was bled to upwards of thirty ounces, and had about 100 leeches applied to the throat; and she took magnesia and linseed-tea, &c.; after which, the abdominal pains became much less, the vomiting less frequent, and she could swallow with less difficulty. Her voice was pretty distinct, with a soft and regular pulse, and a moist and cool skin; but she had two or three shivering-fits, followed by what she called a cold pain felt about the navel.

Two days after, the cough became more troublesome, with constant irritation in the throat, which continued for some time; when, during a violent fit of vomiting and coughing, she brought up a large piece of sloughy membrane, which was found to consist of the inner coats of the œsophagus, much thickened, and very firm in texture; its length was eight or nine inches, and its width that of the œsophagus, being pervious throughout its whole extent. The inside was quite smooth, the exterior ragged; so that the entire mucous membrane, with perhaps some of the circular fibres of the muscular coat, may both be found in the ejected tube which has been preserved, and is now placed upon the table. She experienced great pain in the night after."

The patient had not quitted the hospital in the early part of July, the date of the report. She had been within the walls for six months, and was better during the two last than she had been in the first four. Yet she was rarely able to swallow any thing but fluids, and on the days when she suf-

fered most, she vomited a pint or two of mucous liquid. She had wasted greatly, but her spirits were good.

It would be interesting to be informed of the termination of this case, which appears to have been treated with judgment and decision. The quantity of mucous membrane destroyed in the œsophagus, and, perhaps, some disorganized in the stomach; must render ultimate and perfect recovery difficult, tedious, and uncertain. Should such a recovery take place, it would be curious to observe how the stomach and œsophagus performed their functions, and to ascertain if extensive cicatrization of the latter occasioned any sensible and permanent contraction. Should the patient die, the public would be benefited by a knowledge of the facts disclosed by her dissection.

CITY OF LIMERICK INFIRMARY.

We have received from Mr. Kane, one of the surgeons of the City of Limerick Infirmary, a report of some cases that have occurred under his care in that institution. In an accompanying note, that gentleman alludes to the anxiety we have always shewn for the publication of hospital reports. We are, indeed, most desirous that clinical facts should be closely observed and extensively diffused, and we shall always continue to promote the healthy taste which their study generates. Without further preface, we shall introduce the cases transmitted to us; and we take this opportunity of stating, that we shall feel great pleasure in publishing reports from provincial institutions. All that we require is accuracy in the execution, and brevity in the details.

CASE 1.—Severe Injury of the Ankle Joint: Charles Haurahan, 27 years of age, a pilot, was admitted 19th March, 1834. About four hours previously, while steering a vessel past another, near one of the city quays, his right foot got entangled in a coil of rope, and was caught between the ships. On examination of the limb, the foot was

found to be twisted inwards, at a right angle with the leg; the inferior extremity of the fibula nearly protruded through the skin, and, were the man held erect, it would be found to be the part nearest to the ground—the skin in front of the joint was slightly contused. By flexing the limb, and making extension and counter-extension, reduction was effected with some difficulty. During the reduction, crepitation was very evident. The limb was placed in the usual position in the splints, with bandages, &c.—cold lotions ordered.

On the following day, not feeling much pain in the limb, and anxious to return home, this patient got out of bed, and attempted to walk about the ward; when obliged by the nurse to return to bed, he continued to toss the limb about on this and the following day, which brought on inflammation so violent, as to resist all attempts to subdue it, and which terminated in ulceration and sloughing of the integuments at either side, with profuse purulent discharge from the joint. Hectic symptoms soon set in—the pulse became frequent and small—he had diarrhoea and night-sweats—became much emaciated—appetite impaired, although quinine and other tonics were given. At length it was agreed, in consultation, that amputation afforded the man the only chance of saving his life; he, however, did not consent until the 8th of April, when, assisted by Surgeons Thwaites and Franklin, I removed the limb, at the usual distance from the knee—very little blood was lost; four arteries were tied. The stump was dressed on the 5th day, when it looked healthy, and apparently united, except where the ligature came out.

April 17th. The condition of the patient is much improved since the amputation—the hectic symptoms have disappeared—the centre of the wound, however, this day, shews some tendency to slough; it was accordingly dressed with powdered bark and lint. None of the ligatures have as yet come away.

April 20th. At 11 o'clock, p.m. hæmorrhage suddenly took place from the stump; and, before the tourniquet was

secured, about a pint of blood was lost, which weakened and agitated the patient very much. On my arrival, I removed the dressings and slackened the tourniquet, when a smart jet of blood came, apparently, from the anterior tibial artery. I made three or four attempts to secure the bleeding artery with the tenaculum, but the soft parts giving way, I could not succeed; however, on again slackening the tourniquet, the blood nearly ceased flowing. I then placed a dossil of lint on the bleeding orifice, and filled up the wound with dry lint, and applied compresses and bandages over all.

There was no return of the hæmorrhage—the wound gradually filled up, and was cicatrized by the latter end of May.

On examining the amputated leg, it appeared that the fibula was *unbroken*—the external lateral ligaments of the ankle-joint were torn from the fibula—the malleolar process of the tibia was broken—and the internal part of the articulating surface of the astragalus was broken off, and lay loose in the joint—the synovial membrane was thickened and pulpy, and the joint was bathed in pus.

CASE 2.—*Lithotomy.*

John Minahan, aged 12 years, of a pale and sickly appearance, and with a tumid abdomen, was admitted to hospital 22d April, 1834. Has had symptoms of stone in the bladder for upwards of six years, from which he suffered extremely. He was sounded on presenting himself at the hospital, and the presence of the stone ascertained.

He was ordered to be kept quiet in bed—to get half an ounce of castor oil, and flax-seed tea for drink.

April 26th. The existence of the calculus was confirmed by the sound; the boy has been kept on low diet, and repeatedly purged. In consultation, the operation of lithotomy was determined on, and the consent of the boy's parents obtained.

April 28th. A purgative having been administered at 6 o'clock this morning, and the escape of urine prevented by a ligature on the penis, the operation was

proceeded on at half past one o'clock, p. m., assisted by Surgeons Wilkinson and Franklin, and in presence of other medical gentlemen. The usual lateral operation was performed by the common scalpel alone, and the stone extracted, weighing nine drachms and one scruple (troy weight)—very little blood was lost, and the boy sent to bed. The stone consisted of the triple phosphate, at least externally—it was large in proportion to its weight, and was rough at one end, as if it adhered to the bladder. The stone was oval-shaped, nearly $1\frac{1}{2}$ inch long and 1 inch in breadth. I found it necessary, during its extraction, to enlarge the wound with a bistoury, which was passed along the forceps for that purpose. 5 o'clock, p. m. some urine and clotted blood came away by the wound;—the boy does not complain of pain.

11 o'clock, p. m. There is some tenderness on pressure of the hypogastric region, for which 12 leeches were applied, and the abdomen to be fomented. Half an ounce of castor-oil to be given at 3 o'clock in the morning.

April 29th. Bowels freed by the oil—feels tolerably easy—pulse quick—tongue whitish—much thirst.

8 o'clock. Feverish symptoms, rather on the increase, and some tenderness of the hypogastric region. He was ordered leeches, warm bath, stupes, and calomel, gr. iij. Pulv. antimonial. gr. iij.

30th. Bowels have been frequently freed by the medicine, has some tenderness and fulness of the abdomen—leeches and stupes to be separated.

9 $\frac{1}{2}$ p. m. Pulse much quickened—abdomen tender to the touch—countenance shrunk and cold—nausea and slight vomiting—hiccup occasionally, and general uneasiness. Leeches to be applied over the abdomen, a warm-bath subsequently—hot bran poultices over the abdomen, and to have the following draught in whey. *R. Aquæ ammoniacæ acetat. ʒss. Vini antimonial. gtts. x. Tinct. opii, gtts. xx. M.*—to be repeated every third hour, omitting the opium.

May 1st. Some improvement since last report—no tenderness of abdomen—bowels have been moved—pulse not

so quick, and skin of natural feel—tongue white and rather dry—slept well during the night—the warm bath to be repeated, and draughts as before.

9 $\frac{1}{2}$ p. m. Continues easy—to get ʒss. castor oil towards morning.

May 2d. Bowels freed by the oil—tenderness of abdomen has disappeared—skin natural, pulse not so quick—the urine continues to pass through the wound of natural colour. Diaphoretic draughts to be continued, and warm bath in the evening.

May 3d. Tongue clean—no complaint or uneasiness.

9th. Urine continues to flow by the wound.

19th. The urine has for some days passed partly by the wound, but principally through the urethra. The wound is gradually healing, and the boy rapidly recovering good health. He was discharged from hospital cured, May 26th, and continues in good health.

CASE 3. *Compound Fracture of the Patella, and Wound of the Knee-joint.*

Christopher Delany, æt. 32, a fine healthy young man, was admitted into hospital on the 22d April, 1832. On the previous evening he fell from a height on a heap of stones, one of which caused a compound fracture of the patella of the right leg—the joint was penetrated.

On admission, the limb was much swelled and red about the joint, and considerable pain was inflicted on the slightest motion—a splint was placed under the ham, and simple dressing and a bandage applied, with an anodyne draught at night, composed of xxv. gtts. tinct. opii, and xxx. gtts. vini antimonialis. Bowels to be opened by cl. ricini.

The inflammation continued to increase daily, and at length extensive abscesses formed above, below, and in the joint. Amputation was proposed, but not agreed to at the time. Hectic symptoms now made their appearance, and although quinine, wine, and nourishing diet were given, the man was evidently sinking. He now consented to amputation. The operation (circular incision) was performed sixteen days

after the accident, (at the patient's desire, by Surgeon Thwaites, under whose care he was admitted,)—a large abscess, which extended nearly up to the great trochanter, was cut into—the muscles were greatly wasted. The wound continued foul and sloughing up to the 5th June, 1832, when, in consequence of the hospital being given up for the use of cholera patients, Delany was transferred to the County Infirmary, where he continued to improve until, being seized with cholera, he was sent to the cholera hospital of that parish. After his recovery, he was received here again in the month of July, when the stump presented a healthy granulating surface, but quite cone-shaped, and a large ring of bone protruding. About the middle of August the ring of bone came off, and the stump healed perfectly. In a few days he was discharged cured.

CASE 4. *Compound Fracture of the Patella.*

John M'Namara, 35 years of age, was admitted at 11 o'clock, p. m. April 3d, 1834. A short time before he fell from one of the city quays into a dock, the tide being out at the time. A stone or other sharp substance on which he fell caused a compound fracture of the patella of the right leg. There was considerable hæmorrhage, which subsided when the wound was dressed—and cold evaporating lotions ordered. The wound in the integuments was small and not contused.

On the following day there were considerable swelling and pain over the knee-joint, for which symptoms he was largely bled from the arm—leeches and subsequently cold lotions applied—and purgative medicine ordered.

April 5th. The inflammatory appearances have rather subsided since yesterday—leeches were re-applied, and cold lotions continued. This man being in rather comfortable circumstances, having urgent business at home, and feeling the knee nearly free from pain, insisted on his removal; accordingly, on the following day he was carefully carried to a sail-boat, which conveyed him to his house on the river-side, a

few miles from the city. I have since heard from the medical attendant, of the dispensary, where this man resides, that he recovered in little more than a week, under the applications of cold lotions to the joint, and aperient medicines.

CASE 5. *Compound Fracture of the Leg.*

Thomas Hogan, æt. 40, admitted 2d October, 1833. About an hour before his admission he received a compound fracture of the left leg, about three inches above the ankle-joint. Both bones were broken, and to effect their reduction, the wound was enlarged with a scalpel, and a small piece of the protruded tibia sawn off by means of the chain saw. The limb was placed in splints with the eighteen-tailed bandage. The dressings were not removed until the fifth day, when the wound presented a healthy appearance, and partly united. This man was discharged from hospital perfectly cured on the 9th of November, 39 days after the accident.

CASE 6. *Compound Fracture of the Leg.*

Michael Connel, a slater, aged 30 years, was admitted April 9th, 1834. Immediately before his admission he fell from a high scaffold, and got a compound fracture of the leg, about its middle. A considerable portion of the tibia protruded, to reduce which it was necessary to enlarge the wound in the skin. The limb was placed in splints, &c. and cold evaporating lotions ordered. The dressings were removed on the fourth day, and the wound found partly united. This case proceeded favourably—there was exfoliation of a small piece of the tibia—and the man was discharged cured June 2d 54 days after the accident.

CASE 7. *Compound fracture of the Orbit.*

The following case affords an instance of great tenacity of life in an old person.

Joan M'Namara, 80 years of age, was admitted to hospital at 10 o'clock, p. m. January 18th, 1834. About an

hour before her admission she was looking at some persons fighting, and throwing stones at each other, one of which struck her on the upper part of the face, on the right side. The soft parts were severely lacerated, and the bones forming the outer wall and floor of the orbit were broken in several pieces. The finger could be passed as deep as the entrance of the optic nerve into the orbit, and backwards into the temporal fossa. The pupil of the right eye was much dilated, but sensible to strong light. There was considerable ecchymosis of the lids. Several pieces of broken bone were removed, and the wound lightly dressed, and wine and water ordered until the heat of the surface was restored.

Jan. 19th. She passed a restless night until 3 o'clock, a. m. when her bowels were moved, and she vomited once. Since that time she lay in a kind of drowsy slumber—pulse 70, rather hard.

Jan. 23d. In consequence of the edges of the wound shewing a tendency to gangrene, the mild antiphlogistic treatment hitherto pursued was discontinued, and bark and full diet ordered, and stimulating dressings to the wound. The wound soon put on a healthy appearance, florid granulations sprang up with healthy suppuration—small pieces of bone occasionally came away in the dressings. A tonic plan of treatment with some change occasionally, was pursued for some time—the suppuration continued healthy, and the wound looked well—she had low delirium occasionally, at length bed-sores formed—her stools began to pass involuntarily—the granulations now became glassy, and she sank exhausted on the 15th March, 57 days after the receipt of the injury.

During the progress of the case, a fracture was found in that part of the temporal bone forming the base of the skull, through which healthy suppuration flowed at each dressing—the eyeball became shrivelled—of course sight was destroyed—and granulations appeared to shoot from the sclerotic coat of the eye externally. An inquest was held on the body. I happened not to

be in town on that day, and the attending surgeon did not think it necessary to open the head; otherwise I would have probably given the details of the case fully, with the result of the post-mortem examination.

RICHMOND SURGICAL HOSPITAL.

DR. O'BEIRNE ON HYDROCELE OF THE NECK.

A short notice of this affection will be found at page 513 of the present number of this Journal. A case is there related for the purpose of displaying M. Dupuytren's treatment, and his ideas upon the nature of the malady. Reference is also made to the original description of M. Maunoir, and his use and recommendation of the seton.

Dr. O'Beirne, with whose activity, zeal, and talents, our readers, we are sure, must be familiar, has enriched the pages of our contemporary of Dublin with a lengthened and practical memoir upon this disease. He enters into the history of the opinions which have been expressed, with reference to its nature and the best method of cure, and he does ample justice to the claims and the judgment of M. Maunoir.—With all this, however, we must dispense, and content ourselves with stating the facts and the opinions of Dr. O'Beirne.

We may state that the disease has been frequently confounded with ordinary bronchocele. It actually consists of several serous cysts, which, commencing, of small size, at some point of the side of the neck, gradually increase to such dimensions as to occupy the whole front, and one side of the neck, and seriously impede respiration, deglutition and speech. The tumor, when established, conveys to the touch a distinct sense of fluctuation, and contains a fluid of either a limpid, a reddish, or dark coffee colour, and coagulable by heat. In the great majority of cases, it exists independently of any enlargement of the thyroid gland; in one of Dr. Maunoir's cases it was situ-

ated behind the angle of the lower jaw, at a distance from the gland altogether. But sometimes the latter is implicated in the disease, and, in the second case related by M. Maunoir, it was enlarged and indurated, and formed one-eighth of the whole tumor.

The cyst, according to M. Maunoir, is usually thick; too much so to permit a cure by the operation of injection. Incision of the cyst, the practice recommended by Dupuytren, and extirpation of part or all of it, he equally considers as too serious and severe. In fact his practice is to evacuate by puncture the contents of the tumor, and then to pass a seton through its longest diameter. M. Maunoir himself has related four cases, which are severally quoted, though abridged by our author. Dr. O'Beirne details three, which he has personally witnessed, and to these alone we shall now direct attention.

"Case 1." Stephen Cassidy, aged 60, of a very wizened, weather-beaten appearance, and residing at Meath-hill, county of Meath, admitted into the Richmond Surgical Hospital, under my care, on the 25th of June, 1831. This man had a very large tumour, which occupies the whole of the front and left side of the neck. At its upper part also, it extends into the left side of the neck, and thence passes obliquely downwards to the left sterno-clavicular articulation, at which point it terminates in a rounded projection, and then sweeps upwards and along the left clavicle to within two inches of the left acromion. The whole of the tumour, particularly that part of it which covers the thyroid gland, is remarkably prominent; gives a perfectly distinct sense of fluctuation, and is quite free from any appearance or feel of pulsation. Its integuments are of a natural colour, and so thinned as to be almost diaphanous; and numerous small veins are seen ramifying beneath the distended skin; but on examining the swelling in the ordinary way, by transmitted light, it is not found to be transparent at any point. He complains of no difficulty in breathing or swallowing, or of

any inconvenience whatever, excepting that arising from the great size and unsightliness of the tumour. He states that the disease commenced about twelve years ago, by a very small, moveable swelling in the centre of the triangular space above the acromial third of the left clavicle: and that this lump had gradually, and, without the least pain, increased to its present size. He is very unwilling to allow the tumour to be opened, and assigns as a reason that a medical gentleman had cautioned him against ever permitting it to be opened, as the consequence would assuredly be instant death by hæmorrhage.

Having, with considerable difficulty, and after a delay of five days, succeeded in removing his fears on this account, I resolved, as this was the first case of the kind that I had seen, on merely making an exploratory puncture into the most depending part of the tumour, which was that corresponding to the left sterno-clavicular articulation. I proceeded thus: a transverse fold of the skin covering this part being raised, it was divided by the shoulder of a lancet; when immediately the sac, very thin, and covered with numerous small veins and arteries, protruded through the incision. The point of the lancet was then passed beyond its shoulders into the protruded sac, and a large quantity of reddish serum discharged. At first, the stream appeared so very red that, fearing it to be of pure blood, it was closely examined, and found to consist of two currents, one serous, and the other very slender, and evidently proceeding from a few small arteries on the outer surface of the sac, which had been divided by the lancet. It was observed also, that almost from the instant that this fluid began to pass off, the tumour began to pulsate, but much more strongly above the left clavicle, than at any other part. In a few minutes, the whole of the tumour was evacuated, and all unusual pulsation ceased. The thyroid gland could now be readily felt, and, after careful examination was found in a perfectly natural and healthy state. Successive layers of lint, steeped in cold water, were then laid along the whole of the

left side of the neck, and over these a wet calico roller was applied, so as to exert a moderate degree of pressure. A similar fluid continued to be secreted and discharged by the sac, the dressings became thoroughly soaked, of a reddish colour, and so tightened as to be distressing and require their removal. This discharge continued to flow for three days, wetting, each day, a considerable quantity of old linen, yet without appearing to produce the least debility. On the fourth day it ceased, the opening in the sac and that in the skin having healed; and on the following day, the tumour regained its former size and general appearance.

It was now my intention to again puncture the tumour, and to pass a seton through it; but the patient obstinately persisted in refusing to submit to the second operation, on the plea of an urgent necessity to go home. He was discharged on the 10th of July, faithfully promising, however, to return in a few weeks. Since that time, I have neither seen nor heard of him."

Case 2. The patient was a female, aged 60. The tumor had existed for thirteen years, but its growth had been rapid for the last two months. It occupied the front and nearly the whole of the left side of the neck. On its characters the full description of the other case will preclude the necessity of our saying more, than that the sense of fluctuation was distinct, but of such a nature as to convey the impression of the fluid being contained in a number of distinct cysts. The patient had been admitted into the Anglesey Hospital, under the immediate care of Mr. Hayden. The following operation was performed by that gentleman, assisted by Dr. O'Beirne.

"The skin covering the highest point of the tumour being pinched into a transverse fold, this fold was divided so as to leave a longitudinal wound about an inch long. Some scattered fibres of the platysma were next divided, until the sac came fairly into view. The sac was then freely punctured with a lancet, and a quantity of dark, coffee-coloured fluid discharged. While this

fluid was escaping, a blunt probe, armed with a skein of silk, was passed into the opening, and its point made prominent at the most depending part of the tumour. Incisions were then made at this point through the skin and into the sac; the probe was withdrawn, and the silk left in the usual manner of passing a seton. The tumour being now completely emptied, the thyroid gland was carefully examined, and found quite free from enlargement, hardness, or any other morbid condition perceptible to the eye or touch. On examining the sac also, at its upper part, and separating it from the parts beneath, which was easily effected, another but much smaller cyst was clearly seen and felt at a considerable depth, and situated so directly over the carotids, that it was not considered safe to puncture it."

The subsequent events and the treatment adopted require no especial notice. The seton was withdrawn on the 25th June, after a residence of about a month. The patient was discharged cured on the 10th of July, some cervical glands being then in a condition of chronic enlargement.

The patient was again admitted into hospital, on the 17th of September following, with a small fluctuating tumor, situated about one inch above the left clavicle, and crossed obliquely, at its centre, by the external jugular vein. Mr. Hayden, assisted by Drs. O'Beirne and Ireland, operated upon it in the same way that he had upon the former, and gave exit to a comparatively small quantity of the same kind of fluid. Except slight constitutional disturbance, and accumulation at one or two points which required to be opened by a lancet, nothing remarkable occurred in the progress or treatment of the case; and the woman recovered, with merely a small indurated elevation marking the seat of the second tumor.

We need not detail the particulars of the third case. It is sufficient to observe, that the tumor was seated in the left parotid region—that it presented much the appearance of fungus hæmatodes—that it was punctured on several occasions—that at first, clear red-

dish fluid issued, and afterwards a liquid resembling coffee-grounds, and containing some hydatids—that some inflammatory action occurred in the tumor—and that, finally, the patient left the hospital of his own accord, the tumor having at that time given way, and discharging a good deal.

Dr. O'Beirne defends with cordiality and vigour, the nomenclature and the views of Dr. Maunoir. We shall content ourselves with citing the concluding observations in the essay. They refer to an improvement, suggested by the author, in the manner of introducing the seton.

"Circumstances have convinced me that the operation which I have described, may be considerably improved. In assisting Mr. Hayden, I observed that when the point of the probe was made prominent at the most depending part of the tumour, and he attempted to cut upon the end of the instrument; the integuments glided from side to side, and so effectually evaded the shoulder of the lancet, that it was necessary to make several attempts before the incision could be completed. This was evidently owing to the fluid contents escaping at the upper opening, and rendering the tumour so flaccid as to enable the integuments to slide freely over the sac. In order to obviate this defect, which causes unnecessary pain to the patient, and an awkward kind of embarrassment to the surgeon, it will only be necessary to expose the sac, previous to puncturing it, at the upper and lower extremities of the tumour, by raising and afterwards dividing a transverse fold of the integuments at each of these points. By proceeding in this way, the sac alone opposes the passage of the probe through the lower opening, and no difficulty will be found in cutting into it, so as to allow the instrument to pass, and the seton to be introduced.

After the seton has been passed, I am now disposed to alter my opinion respecting the applications of either a roller or water dressings. I believe that applying a simple dressing, or a light, warm, emollient poultice, would be better practice.

To conclude.—It is somewhat remarkable that, out of ten cases which have been related by Heister, Maunoir, Lawrence, and myself, and in which the side affected is mentioned, nine have occurred on the left side of the neck. The late M. Delpech, whose untimely and awful fate we must all deplore, does not, if Mr. Lawrence's extracts may be trusted, mention the particular side on which either of his two cases occurred. I have seen the first, but have not been able to procure the second, volume of this very distinguished French surgeon's work."

The paper requires no further comment, than the recommendation to peruse its facts, and the expression of thanks to the able author, for directing the attention of the profession, in this country, to the nature and the treatment of cysts, containing aqueous fluid, in the neck.

MEATH HOSPITAL.

OBSERVATIONS ON THE TREATMENT OF VARIOUS DISEASES. By ROBERT J. GRAVES, M.D.

This is not altogether a clinical lecture, and yet it has more of that character than of any other. It is a running expression of Dr. Graves' experience, displaying the familiar ease and the ready illustration of the clinical chair. It occupies thirty pages of our contemporary, but the cream may be advantageously skimmed from that extensive surface.

The subjects on which Dr. Graves discourses are, 1, On effusion of air within the chest in inflammation of the lungs—2, *Bruit de soufflet* of the heart and throbbing of the chest in pneumonia—3, Symmetrical erysipelas—4, On the best method of administering calomel in acute inflammations—5, Spontaneous cure of chronic ascites—6, Diffuse inflammation terminating fatally in consequence of effusion within the chest—7, Loss of the sense of smelling—8, Carbonate of ammonia in the urine—9, On albuminous urine in dropsy—10, On diabetes insipidus.

I. On Effusion of Air within the Chest, in Inflammation of the Lungs.

Dr. Graves details a case of what he considers, and of what, indeed, appears to have been, simple pneumo-thorax,—that is, of pneumo-thorax unconnected with tubercles in the lungs. The particulars of the case may be briefly stated.

A gentleman, æt. 40, of robust constitution and make, caught cold, and was attacked with cough, pain in the right side, bloody expectoration, and, in short, the usual symptoms of very intense pneumonia, commencing in the inferior portion of the right lung, but advancing rapidly upwards, until the whole of that lung was engaged in the disease. As the inflammation extended, the inferior portion of the lung became engorged with blood, and totally impervious to the air, and consequently the part of the chest corresponding to it every where yielded a dull sound on percussion, while the superior part of the right side was as sonorous, when percussed, as the left or healthy side of the chest. Such was the state of things on the third day of the disease. On the morning of the fourth day, a remarkable change was found to have occurred in the course of the night; anteriorly, the dullness of the lower portion of the affected lung still continued, and, indeed, could not be greater, but from a little below the right mamma, as far up as the clavicle, which region, at the preceding visit, was naturally sonorous, the chest yielded a preternaturally clear and hollow sound. Where the sound was thus distinct, no respiratory murmur could be heard. The opposite lung presented well-marked puerile respiration, whilst the sound upon percussion was naturally clear, and, of course, less sonorous than in the upper portion of the right side.

From all these circumstances, Dr. Graves and Dr. Marsh concluded, as they necessarily must, that air was effused into the cavity of the pleura, while the lung was, in consequence, compressed. The previous health and the excellent constitution of the patient, rendered it unlikely that the pneumo-thorax was occasioned by the presence

of tubercles in the lung. They were, therefore, compelled to come to the conclusion, that the air was secreted by the inflamed pleura. The progress of the case supported the opinion.

“At our next visit, in about sixteen hours after, we found the whole region, that had been preternaturally clear on percussion, now dull as possible, and presenting a very obscure respiratory murmur, mixed with some crepitus. The crepitus was evidently close to the ear, if I may use that expression, and we now felt no doubt that the air so suddenly effused, had been as suddenly absorbed, and its place occupied by the inflamed and engorged lung. In the course of four or five days, under proper treatment, this dullness began to diminish, and nearly disappeared in a few days more, during which time the respiratory murmur proportionably increased, and the gentleman afterwards rapidly recovered.”

Dr. Graves remarks that this, and a case which he has previously published, are fully sufficient to establish the existence of simple pneumo-thorax. We believe that this was recognized, and received into the list of human maladies, before Dr. Graves even dreamt of looking for it. Laennec expressly declares that simple pneumo-thorax sometimes occurs; and we strangely misconceive both him and Dr. Graves, if the latter can lay claim to distinguishing or describing a new variety of the disease. We have witnessed two instances of what seemed this affection. One case was remarkable. A school-master, after exposure to cold, was attacked with all the symptoms of acute inflammation of the left lung and pleura. After a time, the side became prominent, was unnaturally resonant upon percussion, and the respiratory murmur could scarcely be discerned. What little there was seemed distant, and was bronchial. Under the treatment adopted, the resonance slowly diminished, and respiration as slowly returned. The patient ultimately recovered, and is now in the enjoyment of good health. We supposed, and still suppose, that this was an example of pneumo-thorax, unconnected with tu-

bercles and vomicae. Dissection has not verified conjecture in any of these instances.

II. *Bruit de Soufflet in the Heart and Throbbing of the Chest in Pneumonia.*

"Another phenomena (says Dr. Graves) observed in the progress of the foregoing case, strongly attracted the attention of Dr. Marsh and myself, bruit de soufflet, of the most distinct and loudest sort, audible not merely in the region of the heart, but over the entire front of the chest. This *bruit did not exist in the subclavian or carotid arteries*; Dr. Marsh, who watched the case with the utmost care, is quite certain that no such sound accompanied the action of the heart in the commencement of the pneumonia; it was not until considerable dulness and disappearance of respiratory murmur over the lower portion of the lung had taken place, that the bruit de soufflet began, increasing in intensity as the inflammation of the right lung spread upwards. This new symptom caused us much uneasiness, and naturally induced the fear that the inflammatory action was not confined to the right lung, but had extended to the heart and great vessels, an occurrence that would have rendered the case almost hopeless. Our fears made us attend to this symptom with the greatest anxiety. For several days it continued without the slightest abatement, but at the period when the stethoscope and general symptoms indicated a notable diminution of the inflammation, then the bruit de soufflet began to diminish in loudness and intensity, and in the course of four days altogether disappeared."

The fact is worth recording; the explanation is uncertain. Throbbing of the chest was another feature of the case in question. It was as strong at the right mamma, and even far above it, as it was directly over the heart itself. Dr. Graves' suppositions on the mode of its production are long, and may be just. The following statements are less liable to doubt. In a case of pneumonia attended by Mr. M. Collins, and himself, the action of the heart was very powerful, and a distinct pul-

sation, corresponding to each ventricular stroke, was perceptible in all the veins of the back of the hand. In a lady, who was attacked with acute peritonitis, venous pulsation was evident to Dr. Ireland, Mr. Crampton, and Dr. Graves.

III. *Symmetrical Erysipelas.*

Dr. Graves relates an instance of erratic cutaneous erysipelas, which travelled at an equal pace, and in a manner exactly similar, upon either side of the median line. The fact is curious, and that is all that can be fairly said of it. We have seen abundance of erysipelas, but we never witnessed an instance of this sort. The practitioner may consume the greater part of his life before he enjoys an opportunity of seeing it; and when that opportunity arrives, it amounts to nothing more than the tickling of sorry curiosity. Two wood-cuts are expended upon it by our author.

Le jeu ne vaut pas la chandelle.

IV. *On the best Mode of administering Calomel in Acute Inflammation.*

Dr. Graves makes some bold and excellent remarks on the exhibition of mercury, in cases of acute inflammation of important organs. He refers, in a highly complimentary manner, to the practice recommended and adopted by the senior Editor of this Journal. Of that practice he approves, and his own would appear to have been founded on it. The practice may be briefly stated.

The patient must take no cold fluids; whatever he drinks must be moderately warm; barley water, without lemon juice, should be preferred; and he should not consume more than three pints of drink in the twenty-four hours, as too much drink disturbs the stomach and bowels, and favours mercurial diarrhoea. Grapes and all fruit must be withheld, a precaution too often entirely neglected, much to the injury of the patient. With these precautions, Dr. G. gives calomel in scruple doses, one daily being usually sufficient, but imminent danger sometimes demanding a second dose, after the expiration of

twelve hours. The supplementary remarks, the cautions, and advice of Dr. Graves are judicious.

V. *Spontaneous cure of Chronic Ascites.*

A lady had for thirteen years been suffering from a gradual accumulation of fluid in the abdomen. This greatly exceeded in dimensions that of a woman in the ninth month of pregnancy. Yet her health was good, and no operation was attempted. About six months ago, the complaint having been stationary for the previous year, the catamenia, which had constantly been scanty, suddenly became frequent and profuse—a copious discharge of urine succeeded—in less than a week night sweats were established—and, in about a fortnight from the commencement of the diuresis, no vestige of ascites was perceptible. The lady went again into society, slim and attenuated as a purged leech.

VI. *Diffuse Inflammation fatal from Effusion into the Chest.*

There is much to be said, and something to be unwritten on the subject of diffuse inflammation. The paper of Dr. Duncan is confused and unsatisfactory, and much of the error and obscurity that may be found in it are owing to the imperfect information of that day, with respect to the secondary inflammations and deposits. We entertain but a mean opinion of the essay of Mr. Lawrence, on Erysipelas Phlegmonodes. It is neither particular nor comprehensive, and it wears the livery of the rhetorician and the advocate, rather than that of the philosophical searcher after truth.

The cases before us, two in number, are not deficient in practical interest, yet we cannot afford to copy their details. The following are the more important circumstances.

Case 1. The patient, a male, aged 22, was admitted into the Meath Hospital, Nov. 11, 1833, with fever of a typhous character, and symptoms chiefly referable to the head. The symptoms had existed for five days. On the seventh day after the commencement of

his illness, he was attacked with epistaxis, and much night delirium. On the eleventh day, he became deaf. After this he improved, but trifling bronchitis was established. On the 21st day he was seized with rigors, succeeded by fever, sore throat and dyspnoea. On the next day the latter symptom had increased, and respiration was attended with a croup-like noise; a good deal of swelling existed on the external part of the throat beneath the lower jaw, which parts were scarcely red, but extremely tender to the touch. The same sort of oedema existed internally, occupying the velum, uvula, and tonsils, so as nearly to close the aperture of the fauces. The mucous membrane lining these parts had a transparent appearance, and was but little, if at all, redder than natural. Slight dulness existed in the postero-inferior portions of both lungs, and moist bronchitic râles were distinguished. On the next day all the symptoms seemed relieved. On the next the respiration was more difficult and hurried. On the following day he died.

Dissection. The muscles of the neck were pale and soft, and the cellular tissue infiltrated with a yellow sero-gelatinous fluid. The sternum and cartilages of the ribs being raised, the cellular tissue between the anterior mediastinum and the sternum presented the same appearance as that in the neck. Effusion into both cavities of the chest, amounting to two quarts of a sero-sanguinolent fluid, in which floated flocculi of lymph. Lymph deposited on the surface of both lungs; but most evident over the interlobular cellular tissue: it was soft, and only occurred in patches. Cellular tissue of pericardium infiltrated with the same jelly-like substance as noticed on anterior mediastinum. Heart firm and contracted, the pericardium full of turbid serum, containing flocculi of lymph, and at the base of the right ventricle an ecchymosed spot about the size of a shilling. The substance of the lungs was crepitant, and no spots of induration could be detected.

On opening the larynx, the chordæ

vocales were found slightly thickened, but otherwise healthy, as were also the parts about the pharynx.

Case 2. A female, æt. 50, admitted into the Meath Hospital. She had suffered from pain in the right side for nine days, and for three or four from a painful swelling of the upper part of the same side of the chest and neck; the swelling was diffuse, colourless, and extremely tender, and pitted slightly upon pressure. The respiration was hurried; the lips were rather livid. There was slight delirium. Dyspnœa increased, and two days after her admission she died.

Dissection. Infiltration of serum and lymph in the cellular tissue of the neck and thorax—whiteness and softening of the pectoral and sternal muscles—cellular membrane of the anterior mediastinum infiltrated with serum and much lymph—bloody fluid in the pleural cavities, and petechial spots on the serous membrane of the lungs and heart—and softening of the latter were the principal morbid alterations discovered.

The low character of the cellular inflammation in the preceding cases—the late period of its occurrence—and the complication of low inflammation of the pleura and the pericardium are characters worthy of attention. The fact is, that diffuse cellular inflammation, in whatever part of the body it is situated, frequently induces, or at all events is attended with, pleuro-pneumonia or pericarditis. We might almost affirm, that we have witnessed innumerable instances of this description; we have certainly seen many. But we cannot enter on this wide, and, to us, seductive subject. We shall probably revert to it fully at a future time.

VII. *Loss of the Sense of Smelling.*

"I had lately an opportunity of observing a very singular case of the total loss of the sense of smelling, occasioned by exposure to the effects of a very strong and disagreeable odour. Mr. —, formerly a captain in a yeomanry corps, was attended by Mr. Barker of Britain-street and myself. He

was affected with ascites, and in the course of conversation one day, mentioned that in the Irish rebellion of 1798, information was received by the magistrates, that five hundred pikes were concealed in one of the markets of this city, buried at the bottom of a large cess-pool, which was filled with the offscourings of the market and all manner of filth. He proceeded to the place, and superintended the work of emptying out the cesspool, at the bottom of which the concealed arms were found as specified. During this operation he was exposed to most abominable effluvia, and suffered greatly at the time from the stench. Next day he found that he had become entirely insensible to odours, and since that, now a period of thirty-six years, he has remained completely deprived of the sense of smelling. From this, it appears, that as exposure to very intense light may produce amaurosis, so exposure to intense odours may produce a corresponding affection of the olfactory nerve."

VIII. *Carbonate of Ammonia in the Urine.*

Dr. Graves had noticed the existence of this salt in a former case, which he published several years ago. The patient, in the present instance, was an athletic man, who, after imprudent exposure to cold, was attacked with anasarca, ascites, and intestinal tympanitis. There were pain and tenderness in the belly, and antiphlogistic treatment was necessary. The urine was now found to contain the carbonate of ammonia in some quantity.

"It was of rather a pale straw colour, contained no albumen, and acted on the vegetable colours as an alkali. It deposited a precipitate consisting of the ammoniaco-magnesian phosphate and phosphate of lime. This remarkable urine was supposed by some who witnessed the violence of its effervescence on the addition of an acid, to owe the formation of its ammoniacal salt to decomposition during its retention in the bladder. But that this was not the source of the carbonate of ammonia, was proved by many circumstances.

It was perfectly limpid when voided, and had not the slightest smell of putrescence, such as exhales from urine even in the commencement of decomposition. Again, when our patient completely emptied the bladder of its contents, and in half an hour afterwards again passed a small quantity of water, this latter was found as copiously loaded with carbonate of ammonia as the former. It necessarily follows, therefore, that the urine, as secreted by the kidneys, contained the carbonate of ammonia which seemed to be a vehicle for excreting those elements which are usually combined so as to form urea, *for in this man's urine, not a trace of urea could be discovered.*

The occasional presence of ammonia in the urine, in the form of the ammoniac-magnesian phosphate, has been long known to chemists; carbonic acid is of much rarer occurrence indeed, for not more than one or two cases have, I believe, been observed, in which carbonate of lime has been found forming a urinary calculus in the human bladder, although so common in swine and other animals.

The patient died. On examining his body, the kidneys were discovered to be rather enlarged, and somewhat turgid with blood. The bladder was perfectly healthy. The liver was misshapen, round at the edges, smaller than natural, indurated, and composed throughout its whole mass of globular masses, very firm and pale, forming a variety of what is called scirrhus liver.

IX. Albuminous Urine in Dropsy.

Dr. Graves is one of those who cannot admit that the presence of albuminous urine in dropsy is conclusive evidence of the existence of structural change in the kidneys. He has seen so many instances of the disappearance of this symptom under proper treatment, that he feels compelled to come to the conclusion, that it may be, and frequently is, produced by functional derangement only of the secreting organ.

We cordially agree with Dr. Graves. Albuminous urine is not unfrequent in cases of disease of the urinary or-

gans, and indeed under circumstances where no disease of those organs can be apprehended. A patient had caries of the tarsal bones, and ulceration of the soft parts of the foot. One day we were tempted, from mere curiosity, to examine the condition of his urine. It was loaded to excess with albumen. The patient was rather broken down in health, but laboured under no apparent affection of the urinary organs. The albuminous condition of the urine continued for some time and gradually disappeared. Another individual had popliteal aneurism, for which the femoral artery was tied. The wound was slow in healing. He was attacked with symptoms indicating the descent of a calculus from the kidney to the bladder. The urine became albuminous. The calculus was voided by the urethra, and proved to be composed of phosphate of lime. In the course of a short time the patient died from an accidental attack of erysipelas. On examining the body, the kidneys, the bladder, and the prostate appeared to be perfectly healthy.

To return to Dr. Graves, he believes, with Frank, that some cases of dropsy may be analogous to diabetes.

"An attentive observation of the different forms under which dropsy presents itself, led me to the following conclusions. When dropsy comes on gradually, is chronic, and unattended by any evidence of being caused by inflammation either of the chest or belly, and where we cannot detect the existence of organic disease either in the thoracic or abdominal cavity, then there is some reason to suspect that the dropsy may be analogous to diabetes. If, in addition to these characters, the urine is found either more copious, or as copious as natural, and especially if it is found to be albuminous, then our suspicions are strengthened, and we are justified in trying the peculiar method of treatment which this variety of dropsy demands, and which consists not in bleeding or leeching, not in purging or exhibiting diuretics, not in mercurializing the system, but in the use of opium and animal food in moderate quantity. Of the success of this

treatment in such cases, (but in such only,) we have had several striking instances in the Meath Hospital."

A case is related in illustration, but it does not demand particular notice.

X. *Diabetes Insipidus.*

Our author details two cases of this affection, as contributions towards its history and treatment. Yet those cases are unsatisfactory, for the patients left the hospital too soon to decide the permanency, or otherwise, of their recovery. A remark of Dr. Graves is deserving of attention.

"Although the urine differed so considerably in specific gravity and chemical composition from that of saccharine diabetes; yet did its qualities and quantity become natural, and the general health improve under the use of the remedies found most beneficial in diabetes mellitus, so that whatever distinction may be made between these affections, according to the nature of the urine, they seem nearly identical as to the constitutional symptoms accompanying them, and the mode of treatment to be employed, if I may judge from the three cases referred to."

Dr. Graves observes, with reference to diabetes mellitus, that although an arid state of the skin is generally present, a tendency to perspirations is sometimes displayed. In the case of a gentleman, in whom the disease had existed for a year, and in whom the daily amount of urine was about six pints, of the sp. gr. 1051, and highly loaded with saccharine matter, exhausting night perspirations were complained of. Dr. Graves saw a similar case, in 1820, under the care of the late Dr. Duncan.

Here we close this notice of a lengthened, yet as valuable as lengthened, article. We have taken many opportunities of noticing in terms of high, and of merited commendation, our contemporary of Dublin. It continues to do credit to its immediate conductors, and to those whose contributions occupy and adorn it. We trust that the principles of the profession in Ireland will continue to support the only medical periodical of which Ireland can boast.

These are times for all to be up and stirring, and we trust that the activity of Irishmen will not continue to be chiefly shewn in religious animosities and the use of the shillelah.

MANCHESTER ROYAL INFIRMARY.

CLINICAL LECTURES. By Dr. CARBUTT.*

We have said so much, and discoursed so often on the benefits to be derived from the publication of hospital reports, as well as from the systematic delivery of clinical lectures, that we will not sing again that cuckoo-note. Yet we think we may fairly lay claim to the merit, of having aroused the medical officers of hospitals and infirmaries to consult their own interests and those of science, by diffusing a knowledge of the varied and important facts which present themselves to notice in public institutions. We have doubted, and we still doubt, whether separate and bulky volumes constitute the best mode of publishing clinical lectures and reports. We are sure it is expensive; we believe it is, therefore, inefficient. Many a hospital surgeon or physician is wisely deterred by prudential considerations from the venture—and the work when published is seldom purchased. A well-arranged system of quarterly reports in the pages of a periodical would probably be the only plan likely to enjoy stability or attain success.

We shall liberally draw from Dr. Carbutt's work on various future occasions. On the present, we shall offer a brief sketch of its nature—and direct a hasty glance at its object.

The diseases which occupy the attention of Dr. Carbutt are Gastro-enteritis—peritonitis—jaundice—bronchitis—pneumonia—pleurisy—scarlet fever—ague—rheumatism—amenorrhœa

* Clinical Lectures in the Manchester Royal Infirmary. By E. CARBUTT, M. D. Octavo, pp. 407. London, 1834.

—feigned disease—chorea—painter's colic—secondary syphilis—dropsy—and diabetes. Some of these affections are honoured with a greater, some with a smaller degree of consideration. The details of one hundred cases are presented, and they occupy the principal portion of the volume. The observations are generally brief, and such as naturally spring from the facts.

The object of the work may be learnt from some remarks contained in a short introduction to the cases. Before we advert more particularly to it, we must seize the opportunity of quoting one passage, intended to urge the medical practitioner to recollect that he is, and must ever continue, a student.

"The progress of science," says Dr. Carbutt, "is so rapid, that if you once consent to give up study, and to satisfy yourselves with the knowledge acquired up to any particular period, you will remain like a ship at anchor when the tide is driving fast, and will have the mortification of seeing every little boat shooting a-head of you, and leaving you further and further behind."

The remark may be trite, yet its truth is such that it cannot be too forcibly impressed on the profession. Examples of such stationary gentlemen as Dr. Carbutt has depicted are too frequent, even in the highest places. The veteran apothecary and the old physician are too often specimens of antiquated ignorance, and respectable imbecility. Disdaining the new-fangled notions of pathology, they hug the good old precepts, and prescribe the good old remedies; and if haply some opinionated "nervous fever" will have its way in spite of even the best-concocted juleps, why the patient dies as others died before him, according to the rules and the practices of art. By the way, the nautical metaphor of Dr. Carbutt is not altogether unexceptionable. Had Manchester been near the sea, Dr. Carbutt would probably have found that ships at anchor, "when the tide is driving fast," seldom experience much mortification from seeing little boats shoot a-head of them. The tide is usually observed to run in the opposite direction, and little

boats, as well as big ones, are commonly very glad to swim with it.

But we wished to exhibit the object of this volume. It is this.

"Clinical lectures, I have said, give you an opportunity of seeing and studying cases, so as to render you in some degree familiar with diseases and treatment. And yet I feel it to be my duty to caution you against becoming what may be called case-practitioners. You must practise from principles and not from cases."

And further on Dr. Carbutt proceeds:—

"Now, I would recommend you to study as many cases as you can, but solely with a view to enable you to form, correct, or strengthen your principles of practice. If you see that either sensibility or the power of muscular motion is lost, you may be assured that the nervous system, in some of its parts, either of the brain, the spinal cord, the ganglions, or the nervous filaments are, or have been, oppressed in some manner, or otherwise injured. You must endeavour to discover the cause of this, and then to remove it. Of the means of accomplishing these objects, we shall afterwards have occasion to speak.

Again, from the cases you have witnessed or will witness, you may form this conclusion, that the most likely mode of lessening entonic inflammation in any part of the body, is to lower the action of the heart both in force and frequency; and that the way to do this is to abstract blood from the circulating system. You will, therefore, bleed in acute rheumatism, in inflammation of the brain, of the ear, of the throat, of the larynx and windpipe, of the lungs and the pleura, which last inflammation is called pleurisy, in inflammation of the heart, in peritonitis, in inflammation of the stomach, of the intestines, of the liver, of the spleen, of the kidneys, of the bladder, and in various other inflammations; that is to say, if all the inflammations which I have enumerated, and also those which I have not enumerated, be acute or entonic.

In like manner you will lay it down as a principle that the same abstraction

of blood, for the same reason, is the best method of arresting entonic hemorrhage; that is, the vigorous and spontaneous effusion of blood from any of the outlets of the body. You will, therefore, draw blood in entonic bleeding at the nose, entonic spitting of blood, entonic vomiting of blood, entonic bloody urine, entonic uterine hemorrhage, entonic anal hemorrhage.

So, you will find, that in entonic inflammation, and in entonic hemorrhage, except perhaps, that those affections be seated in the inner or mucous membrane of the alimentary canal, an excellent assistant to the abstraction of blood is the administration of purgatives. You will therefore give purgatives proportioned to the age and strength of your patients. In inflammation or hemorrhage of the mucous membrane of the alimentary canal, you must abstain from violent purgatives, for reasons which I shall have frequent opportunities of explaining.

You will also soon discover the principles that the administration of mercury so as slightly to affect the mouth is an almost certain method of overcoming inflammation in all the membranes or textures; except, perhaps, the mucous membranes, for I am not quite certain about them. You will, therefore, administer mercury, in an appropriate manner, in all inflammations of serous membranes, of cellular texture, of muscular texture, of tendinous, and ligamentous texture, of nervous texture, of dermatic texture or skin, and of cartilaginous texture.—That mercury has the same power in inflammations of mucous membranes has been asserted. I do not mean to deny it; but I have some doubts.”

It appears to us that the preceding doctrines concerning principles is not so clear as Dr. Carbutt seems to think. We will not turn his position by a joke, nor do we intend to lay stress on the case of the philosophical tailors of Laputa, who, cutting their coats upon abstract principles, were the very worst fitters that Gulliver had seen.

But what are principles in medical science? Are they truths derived from some genuine revelation—or ab-

stract expressions, the product of some unerring mental operations? Perhaps a slight analysis of the principles directly stated by our author, may assist us in determining their nature. It is a principle, then, according to the Doctor, that “mercury administered so as slightly to affect the mouth, is an almost certain method of overcoming inflammation in all the membranes or textures, excepting, perhaps, the mucous membranes.” Following out this principle, Dr. Carbutt tells his pupils to administer mercury, in an appropriate manner, in all inflammations of cellular texture—of dermatic texture (that is, skin)—and of cartilaginous texture.

A little consideration will render it apparent, that “principle,” in these instances, means nothing more than the expression of the fact; that fact could only be determined by experiments; and those experiments were surely cases. Supposing the principle, then to be correct, it resolves itself into a simple expression, an algebraic exponent, of many individual cases.

We contend that this erection of “principles” into rules and guides of conduct is pernicious to the understanding of the pupil. It is a seemingly short cut to truth, which frequently leads into a bog. It resembles the adoption of saints and martyrs, as intercessors in the Catholic faith; those saints and martyrs at length usurped the honours of the Deity. We profess ourselves Iconoclasts, and would shiver these symbols of idolatrous adorers.

To revert more closely to the question. We repeat, that a “principle,” in physic, implies nothing more than the constant occurrence of a fact—that it must have been established, and can only be maintained, by the actual observation of cases—that the process by which itself was deduced can never be injurious to the minds of students; for, if the principle is strictly accurate, the student should still examine for himself, and learn to test its accuracy by personal investigation. This is the true spirit of induction, the highest exercise and noblest privilege of reason. To erect even truths of demonstration into

laws which should not be questioned, and need not be examined, would be to erect a debasing despotism in the intellectual world. What would be thought of the geometrician, who asserted that the sides of an equilateral triangle were equal to each other, yet objected to the careful examination of the problem! The case is analogous to that of the lecturer, who affirms certain laws, which can only be proved or rebutted by the careful observation of cases, yet requires that the pupil should study cases with the conviction, *a priori*, that those laws are true.

We have put the case in a favourable manner, by supposing that the "principles" are actually true. But if they should be doubtful, or absolutely false, we need scarcely say that the mischief would be seriously aggravated. We have no hesitation in affirming, that some of the principles of Dr. Carbutt are of dubious character. He asserts, for instance, that the use of mercury, so as slightly to affect the mouth, "is an almost certain method of overcoming inflammation in all the membranes or textures, except, perhaps, the mucous membranes." And, acting on the principle thus laid down, Dr. Carbutt as we said before, decidedly tells his pupils to exhibit mercury, in all inflammations of cellular, dermatic, and cartilaginous texture. Erysipelas is inflammation of the skin, and diffuse cellular inflammation is seated, of course, in the cellular texture. We have no hesitation whatever in asserting, that mercury, administered so as slightly to affect the mouth, is always unnecessary, and frequently injurious, in the first affection—and that no good surgeon would, in the great majority of cases, consider it prudent to resort to it in the second. Here, then, is a wide separation of opinions, on what is held up to inexperienced pupils as a fundamental principle.

Our own advice to pupils is—

Be led till you are able to run alone—but not one moment longer. Look on all laws and all principle (we allude to medicine) with considerate distrust—recollect that these are drawn from the observations of others, that Nature is before you, and that you have as good a right to observe as they. We give not this advice to encourage arrogance, but to promote induction. Without that, there is no sound and stable philosophy—no laws that can claim obedience—no generalizations that are safe or certain.

Dr. Carbutt alludes, with a feeling of contempt, to what may be called the mere "case-practitioner." We have seen that he contrasts with this plodding hack his thorough-bred, principle-fed racer. The former is, indeed, a sluggish beast, but the latter is gingered, and got up for show.

The fact is, that the very best men in our profession are what Dr. Carbutt calls "case-practitioners." But case practitioners are not all alike. Some men witness cases—some observe them. The former constitute the mere routinists, men who do not rise above the comprehension and the treatment of symptoms; such are Dr. Carbutt's case-practitioners. The other class to which we have alluded watch the phenomena which cases present—they analyse, combine, compare—and the results are generalizations, or, as Dr. Carbutt terms them, principles, which serve to facilitate the comprehension, and assist the management, of the cases that shall follow. This, however, is a different thing from setting out with laws and principles ready-made, and calculated to control rather than to help.

In succeeding Numbers, we shall analyse or notice, as circumstances may require, the cases and the observations contained in the volume. In the interim, we recommend our brethren to peruse it.

MISCELLANIES.

THE NORTH-WEST LONDON SELF-SUPPORTING DISPENSARY.

We are not exactly of the Chancellor's school, nor do we think it absolutely indispensable that a man should break his ribs, his head, or his skull, in order to be qualified to receive gratuitous medical assistance. No doubt, the knowledge that a pauper fund exists is injurious, in some measure, medically as politically. But the balance of good is vastly in its favour; and medical charity, on an extensive scale, is probably attended with a smaller amount of ultimate mischief, than any other form of this offspring of humanity and kindness. There is one consideration in favour of these charities, which appears to have been totally lost sight of—their importance as a means of medical education. Were the Chancellor seriously to attempt to put down all medical charities, save and excepting hospitals for accidents, we should like to know how, where, and when the professional youth should receive their education? The Malthusians, we ween, would look exceeding blue, did they find that themselves and their families were deprived of decent professional assistance—that their wives must be consigned to the science of midwives—and their own inflammations, and choleras, and fevers, be entrusted to the hands of a set of empirics. Then the titled railers at a charity fund would import their physicians from some foreign land, where ignorance of the true principles of political economy perpetuated hospitals, and maintained institutions for the halt and blind. Yet we need not throw away words on the affair, for the whole is an idle, shapeless dream, incapable of form, and impossible of occurrence.*

— * Some of our contemporaries, not content with the medical portion of the question, have taken into consideration the Poor-law Bill. The passions and the politics of the newspaper have invaded the pages which should be exclu-

Whilst we laugh at the idea of abolishing hospitals, we feel that it is politic and in every way desirable, to prevent the lower classes from leaning too much on the certainty of gratuitous advice. The penny earnings squandered in the destruction of life by gin, might be usefully and honorably appropriated to securing the means of restoring health, or alleviating suffering, at a future day. That which philanthropy might wish, active benevolence, it would seem, has effected. In many country districts, self-supporting dispensaries have been founded, and are flourishing. The labourer and the mechanic have been taught to believe, and have discovered by experience, that a very few pence, judiciously applied, will preserve their independence, maintain their health, and draw the bold line between honourable self-respect, and the cringing, spurned, and wretched degradation of the pauper. Oh! it was a noble wish, to plant and to foster the seed of forethought in the bosom of the poor man, and well may it succeed.

The North-west London Self-supporting Dispensary is the offspring of those which have preceded it in the provinces. It is patronized by the noble and the wealthy, the Bishop of London being its president, and a long array of lords and gentlemen lending it their countenance and name. Its medical officers are of high respectability, and nothing wearing even the faintest colour of a job sticks any where about it.* The experiment of establishing a self-supporting dispensary in London is fairly made, and will be fully tried. We will glance at some of the

sively devoted to science. The thing may be harmless—it is certainly absurd.

* Amongst the medical officers are Dr. Copland—Dr. C. B. Williams, the author of some excellent observations upon auscultation—Mr. Copland Hutchison—and Mr. Cæsar Hawkins.

more prominent features of the institution.

The following outline of the plan is presented in a circular, printed by the managing committee.

The Institution is supported by two distinct funds—the *Honorary* and the *Ordinary* Fund.

The *Honorary* Fund is derived from the subscriptions and donations of the benevolent, and is applied to defray the expenses of the Establishment, and the dispenser's salary.

The *Ordinary* Fund consists of the small periodical payments of the poor subscribers (one penny a week for each adult, and one halfpenny for each child, or one penny for all the children of a family, where there are more than two,) and is devoted to the purchase of drugs, and the remuneration of the ordinary medical attendants.

Before persons can be admitted to the benefits of the Institution as ordinary subscribers, their circumstances are investigated by the Secretary and a Sub-committee, to ascertain that they really belong to that class for which the Institution is formed. The proceedings of the Sub-committee, as well as the general business of the Institution, are under the direction of the Committee. The power of controlling the Committee, of altering or making laws, and of electing or removing officers, is vested in the Governors (donors of ten guineas, or Annual Subscribers of one guinea,) who meet once a year, or oftener, as circumstances may require.

Four medical officers, in ordinary, who are general practitioners, attend in turn daily at the Dispensary, and visit, at their own homes, those of the ordinary subscribers who are too ill to come out. There are, besides, five consulting medical officers, physicians and surgeons, who give their services gratuitously, in cases of difficulty or danger.

This plan is adopted, with some modifications, from that of the Corentry Self-supporting Dispensary; and, as a proof of the practical success of that Establishment, it may be stated, that during the last year, which was its third, 1668 patients had been attended,

and the free members' or ordinary fund amounted to £400. 12s. of which £112. 12s. were paid for drugs, and the remainder divided among the medical attendants.

We shall select such of the rules affecting ordinary subscribers, the class to be relieved, as develop the more important parts of the constitution of this self-supporting dispensary.

"I. The Ordinary Subscribers shall consist of small tradesmen, working persons, individuals of small income, and servants, their wives and children, not receiving parish relief, and who are unable to pay for medical advice in the usual manner, residing within the following limits.—The New Road, Oxford Street, the Edgeware Road, Portland Place, and Regent Street.

II. Any such person wishing to become an Ordinary Subscriber, must apply to the Secretary, who shall enter the name, age, residence, and occupation; the application will then be taken into consideration by the Sub-committee, and if found eligible, the applicant will be admitted, and receive a ticket on paying one month's subscription.

III. Every Ordinary Subscriber above fourteen years of age shall pay one penny, and under that age one halfpenny a week, except in a family with more than two children, when one penny a week shall be considered sufficient for all under fourteen years of age. Female servants shall pay five shillings a year, and male servants seven shillings, in not less than half-yearly payments.

IV. The payments of the Ordinary Subscribers shall be made at the Dispensary in advance, weekly or for any longer period. No one will be entitled to the benefits of the Institution if in arrear: and each family shall pay a fine of one penny for the arrear of every week. If any Ordinary Subscriber shall be more than four weeks in arrear, his or her name shall be erased from the books.

V. No one actually labouring under sickness can be admitted an Ordinary Subscriber, unless two healthy persons above fourteen years of age enter at the same time and each pay the whole

year's subscription in advance. Any such person unable to procure two others to enter with him, shall, by paying ten shillings, be entitled to the privileges of an Ordinary Subscriber for three months; and may afterwards continue to be entitled to the benefits of the Institution by paying the usual rate of subscription."

Each patient may choose his or her medical attendant in the first instance; but he must not subsequently revoke his choice.

Any married Ordinary Subscriber being pregnant, may have the attendance of whichever Medical Officer in ordinary she may prefer, on depositing at the Dispensary half a guinea, either at once or by instalments, one month before her expected confinement.

Those who are sufficiently well, attend at stated hours at the dispensary—while those whose illness is too severe to permit such attendance, are visited at their own homes by the medical officers.

There is only one danger to be apprehended in the practical operation of these establishments. We all know the cruel indifference and neglect displayed by the subalterns, at hospitals and dispensaries, to the unhappy patients. Compelled to waste hour after hour in waiting to be seen, or in expecting their medicines, the industrious poor are heartlessly robbed of their time, their best possession, while their spirits are broken, and their maladies are aggravated, by exposure in cold and comfortless lobbies. Expostulation brings insult, and insult begets despair, till, too frequently, the patient is urged to discontinue the painful and perhaps injurious attendance—to turn with disgust from the cruel dole of insolent charity—and to submit, without a further struggle, to his fate. This is no exaggerated picture of the miserable hanger-on at a dispensary; and often have we heard a sickly mother bitterly complain, that her child and herself must perish unassisted, rather than suffer the intolerable delays and the hard-hearted arrogance of dispensary Dogberries. We fear that the small sums subscribed by the patients, in

these new institutions, may tempt their menials to treat them as paupers are too often treated. The committee should keep a watchful eye on this, for slight as seems the evil, it cuts keen.

LAST CURRICULUM OF THE COLLEGE OF SURGEONS.

We really cannot say whether this curriculum, promulgated in July of the present year, is merely a reiteration of former rules and regulations, or a genuine addition to the family of the college. Curricula have lately been so plenty, that we feel as much difficulty in distinguishing their features, names, and ages, as if we were placed amongst a series of twins. Whether the present be new or old, it is undoubtedly the last, and will constitute the law, we presume, for a season. There is tacked to it a recommendation which may merit a remark.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma.

1. Candidates will be required to bring proof:—
 1. Of being twenty-two years of age.
 2. Of having been engaged five years in the acquirement of professional knowledge.
 3. Of having studied Anatomy and Physiology, by attendance on Lectures and Demonstrations, and by Dissections, during two anatomical sessions.
 4. Of having attended at least two courses of Lectures on Surgery, delivered in two distinct periods or seasons, each course to comprise not less than sixty Lectures.
 5. Of having attended lectures on the Practice of Physic, on Chemistry and on Midwifery, during six months; comprising not less than sixty Lectures respectively, and on Botany and Materia Medica during three months.
 6. Of having attended, during twelve months, the surgical practice of a recognised hospital in London, Dublin, Edinburgh, Glasgow, or Aberdeen; or

for six months in any one of such hospitals, and twelve months in any recognised provincial hospital.

II. Members and Licentiates in Surgery of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, will be admitted for examination on producing their Diploma, License, or Degree, together with proofs of being twenty-two years of age, and of having been occupied five years in the acquirement of professional knowledge.

N.B.—Certificates will not be recognised from any hospital unless the surgeons thereto, or a majority of them, be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any school of Anatomy, Physiology, Surgery, or Midwifery, unless the respective teachers be members of some legally constituted College of Physicians or Surgeons in the United Kingdom.

Certificates will not be received on more than two branches of science from one and the same Lecturer, but Anatomy and Physiology, Demonstrations and Dissections, *Materia Medica* and Botany, will be respectively considered as one branch of science.

In the Certificates of attendance on Hospital Practice, and on Lectures, the dates of commencement and termination are to be inserted in words at full length.

All the required Certificates are to be delivered at the College ten days before the Candidate can be admitted to Examination.

(By Order of the Council.)

EDMUND BELFOUR, Sec.

July 10, 1834.

Few observations are necessary at present upon these regulations. The medical constitution is at this moment in so feverish and precarious a condition, that the Colleges might pause in the issue of their Bulletins or prescriptions, and certainly it is unnecessary to contemplate with a very critical eye, directions and orders which may pos-

sibly be shortly over-ruled by the legislature. When we look at the regulations before us, we are struck with their inadequacy to ensure a high amount of surgical attainments. The young man of twenty-two, who has spent only five years in learning his profession, who has dissected for two seasons, walked a hospital for one year, and acquired such a smattering of surgery, physic, chemistry, midwifery, and botany, as the courses of lectures prescribed can confer—may possibly be adapted for a college examination, may probably be possessed of respectable acquirements, but assuredly is fit for little but the former, and cannot pretend to more than the latter. Yet we think that the circumstances to which we have alluded will excuse our pursuing the subject further.

Appended to the regulations is a circular addressed to lecturers, which conveys a sort of censure on them and on their pupils.

Circular to Lecturers.

SIR,—In consequence of the occasional irregularities that have taken place in the certificates, transmitted to the Court of Examiners of this College, I am directed by the Council to acquaint you, that it is their anxious wish to have some plan devised and adopted by the lecturers at the various medical schools of the United Kingdom whereby the regular attendance of the students on the lectures at such schools may be enforced and registered so as to entitle the students to receive, and to justify the lecturers in giving, certificates of attendance, the accuracy of which may be relied upon by this College, and which the greatest vigilance and circumspection on the part of the lecturers cannot at all times secure under the present system, where there is a want of some such check and registry.

The Council will consider themselves obliged by your attention to their wishes, and will thankfully receive any suggestions you may be pleased to offer on the means which, in the opinion of yourself and your colleagues, may be

best adapted to effect this important object.

I have the honour to be, Sir,

Your most obedient,

Humble servant,

EDMUND BELFOUR, Sec.

July 1, 1834.

It is undoubtedly desirable that certificates of attendance upon lectures should have something like truth to recommend them. It is monstrous that a pupil should have it in his power to absent himself from lectures, and still be entitled to certificates of attendance on them. Yet surely the facility and the frequency of this practice form a biting commentary on the College examinations, "or the "recognized" lectures. For our own parts, we almost think that the College might have spared itself the trouble of the circular. Were its own examinations searching, it would signify little what lectures the student had attended or had slurred. Under the expectation of a strict ordeal he must and he would repair to the sources of real information, the dissecting room, the hospital, or the lecture. And if the ordeal is not severe the Council of the College may be well assured that their ingenuity will be frustrated by the stronger motives of pleasure, of indolence, or of disgust. Where the lecturer is calculated to convey instruction, his benches are comparatively seldom empty.

PROVINCIAL MEDICAL SCHOOLS.

James Collins, M.D. of Liverpool, has written a long letter in the Medical Gazette, avowedly for the purpose of exposing Provincial Schools of Medicine, and evidently with the view of satirizing a large class of his provincial brethren. We shall not attempt to analyze the motives of this letter-writing gentleman—we will not pronounce upon the taste, the candour, the professional conduct, or the gentlemanly feeling which characterize the remarkable production. The fearless detector of the wrong doings of his neighbours

is doubtless immaculate himself—is unquestionably free from those sentiments of envy, hatred and uncharitableness, which too often embitter the observation of success in which we are prevented from participating—is certainly actuated by zeal for the profession, and an ardent desire for the interests of science.

Yet the following picture might seem to display the exaggeration of the satirist, with some of his ill-nature. It is in colours such as these, that Dr. Collins depicts the rise and the progress of the surgeons and physicians of Liverpool.

"The practice usually is, for those beginning to settle, to remain for some time unattached to any particular sect or party, and to observe in silence how the wind may blow, and how others got on before them. In the interim they are not idle; they are active in extending their acquaintances, and by pliancy of character fitting themselves for whatever may turn up, or for any vacancy in this or that congregation. Whatever people may say of the usual want of religion in medical men, here they are remarkably edifying. Some of them preach, pray, and assist as regular stewards of the vineyard, by word and example. Some read the service of their church in the streets on Sunday, as they pass along in their carriages or gigs, intimating thereby that they have not time for attendance at their church or chapel; others are very conspicuous leaders of class meetings; and many of them pray with their patients as regularly as they visit them, and hold prayer meetings at their own houses for them and others. In fact, few towns present such an instructive and edifying example as Liverpool. Here all sects have their favourite physician and surgeon; church and chapel differ little in this respect. Here every thing connected with religion or morals, bible and missionary meetings, temperance and providence societies, tract and religious associations, readily meet the support and countenance of medical men; and as the labourer is worthy of his hire, they have their reward in increased practice and connexion, or occasionally

in a happy and lucrative matrimonial hit. It is no uncommon thing to see medical men here pass through all sects before they get one that answers. Some have begun their career as unitarians, then turned presbyterians, independents, methodists—in fact every thing before they finally settled down into their present character of high church folk; and I am satisfied would as easily revert again to the point whence they started, had they an interest in doing so. The great advantage to be had in being occasionally a member of different sects, is that acquaintances are made in each, and retained by a little tact and hospitality, no matter into whatever religious denomination you may afterwards pass. Indeed, the success of one of our first surgeons is owing to a calculation and tact of this sort; others have identified themselves at once with the high church and corporation religion of the town, and have generally been the most successful. They embarked at once with the strong party in the days of profligate corporation expenditure and rule, and have kept steady and true to their party and interest."

It may be as Dr. Collins says—his contemporaries may be calculating, pale-faced hypocrites, Cantwells who preach and purloin at the same instant—this may be true, most strictly true—but the question will arise, is Dr. Collins justified in publicly announcing it? The honourable reader may inquire what right Dr. Collins can claim to the office of censor—why *he* should step forward to denounce his brethren as rogues and vagabonds. Yes, as rogues and vagabonds—perjurers who might experience and would merit the vengeance of the law. That the accusation is so gross is evident from a passage we proceed to quote.

"Others, again, stick their advertisements of lecturing in the medical library, the shops, the newspapers, and other places of notoriety, without giving or intending a lecture. In fact, this custom is getting very much into vogue: I wish it were more general, as, however quackish it may be, it can never injure the profession like the free-school

system. The lecturers, when reproached with admitting persons to their lectures who never pay, though able to pay, say they do no harm, as they never give certificates of attendance without being paid. This may be so, for aught I know; but there was one gentleman, now deceased, in the habit of giving certificates of attendance on lectures he never delivered: he differed from others, inasmuch as he got paid for lectures he never gave. Even in his last sickness, a few hours before his death, for the sake of the money, and to oblige a friend, he put his name to one of those fictitious certificates; and yet he was a *respectable* man, a graduate of Cambridge, and a man of very considerable property."

If Dr. Collins has already gone so far, he may possibly be asked to proceed a little farther—to name the criminal he has so darkly painted. We can scarcely believe that any man would venture to manufacture false certificates in open day, as the culprit to whom Dr. Collins has alluded, must of course have done.

It is evident that the letter is of such a nature, as to render a rejoinder on the part of some member of the schools of Liverpool absolutely necessary. That it will have received an answer, of some kind, before the present notice is published, we can entertain but little doubt; and we should not be surprised, if in the heat of warfare, Dr. Collins experiences some ugly wounds. His antagonists may possibly employ the poisoned weapon he has used himself and attack his motives, his character, and reputation. Strong in the consciousness of ill-natured truth, Dr. Collins may perhaps repel the assault.

Our business is not so much with Dr. Collins and his brethren, as with the question of permitting medical education to be exclusively provincial.—There is much to be said upon both sides, but looking at the subject as dispassionately as possible, we are decidedly averse to such permission being granted. Whatever may be the talents, whatever the assiduity of provincial surgeons and physicians, their metropolitan brethren must always pos-

sess more extensive opportunities of becoming thoroughly acquainted with a science, which, in its practical application, is essentially founded on experience. Perhaps this is more strictly true of surgery than physic. The London surgeon in extensive practice *must* see and do much more than his provincial brother. The numbers of patients who repair from the country to London for medical advice, are the means of affording valuable information to those whom they consult.

Independent of the value of London tuition, the variety is advantageous. Were successive generations of provincial practitioners to be born, bred, educated, and established in the same county or town, we think there can be little question that the race would not thrive. The breed must be crossed in the moral world as in the animal, in order to prevent degeneration. Is there a provincial surgeon, possessed of means and ambitious of distinction, who would not voluntarily assist or complete his professional education in London? We venture to say that all would who could, and what common sense and self-interest would prompt for the benefit of one, must be equally adapted for the advantage of the many.

But the most important argument remains behind. It may be granted that no real scientific improvement results from attendance on the lecturers in London—that the country teachers are adapted for their office, yet still it would admit of more than doubt, if increased facilities and diminished expense to the student of medicine are really calculated to benefit the profession.

In the present constitution of society, what the world calls respectability is essential to the interests of classes as

of individuals. That respectability may possibly be measured by a vicious standard—and general education, some degree of property, and gentlemanly manners, may not be the best tests of professional capacity. But, till the world is altered for the better, we must take it as it is; and, without interfering with the Owenites or St. Simonians, or any other order of philosophical philanthropists, we must, we are afraid, accommodate ourselves to circumstances. Now, the public complain that we are not on a par, in point of respectability, with the kindred professions of divinity and law. Those professions have more volunteers from the upper classes, they take the best men from the schools and the universities. If we render our education cheaper, our degrees more accessible than they are at present, we offer a bounty for the services of low-born, ill-bred recruits, who will swamp us by their numbers, and degrade us by their characters.

The object of the legislator and the friend to the profession should be to enhance its real respectability. This can only be done by thinning its numbers, and augmenting the acquirements of its members. It will not be effected by sending cryers to the lanes and highways, and bidding every beggar to the feast. If our College examinations were extremely rigid, instead of being, as they are, extremely lax—if the age of the candidate were required to be greater than it is at present—if some efficient guarantee were obtained for a *good* preliminary education—then we might be tempted to assent to the doctrine that it matters nothing where the actual knowledge is procured. But the present checks on the admission of unworthy persons are so slight, that we cannot afford to spare one.

BARONETCY OF MR. BRODIE.

The newspapers and the weekly medical journals will probably have informed the great majority of our readers, that his Majesty has been pleased to confer on Mr. Brodie the honor of the Baronetcy. Sir Benjamin Collins Brodie, for that is the present title of this eminent surgeon, has honorably merited this mark of the favour and discernment of his sovereign. The laurel-wreath was already on the brow; it has been merely gilt.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review since last Quarter.

1. A new system of Organic Chemistry, translated from the French of F. V. Raspail, with Notes and Additions. By WILLIAM HENDERSON, M. D. Lecturer on Materia Medica in the University of Aberdeen, Svo. pp. 602, with numerous plates, June 1834.

2. A practical Treatise on the Diseases of the Uterus and its Appendages; translated from the French of Madame Veuve Boivin, Sage-femme Surveillante en Chef de la Maison de Santé, &c. and A Dugès, Professeur a la Faculté de Médecine de Montpellier, with copious Notes. By G. O. HEMING, F.L.S. Consulting Accoucheur to the St. Pancras Infirmary, &c. Two volumes 8vo. (one of them plates), pp. 560. Lond. 1834. 14s. and 12s. boards.

3. Anatomie Pathologique du Corps Humain, &c. Par M. CRUVEILHIER. 19th Livraison, Maladies du Foie, de la Rate, et du Grand Epiploon, &c. Bailliere, July, 1834.

4. Chemical Recreations:—a Series of amusing and instructive Experiments, which may be performed with ease, safety, success and economy. To which is added, The Romance of Chemistry, an Inquiry into the Fallacies of the prevailing Theory of Chemistry, &c. By JOHN JOSEPH GRIFFIN. Small 8vo. pp. 372, with numerous woodcuts; 7th edition, entirely re-written. Glasgow, June, 1834.

5. A practical Treatise on Medical Jurisprudence, with so much of Anatomy, Physiology, Pathology, and the Practice of Medicine, as are essential to be known by Members of Parliament, Lawyers, Coroners, Magistrates, Officers in the Army and Navy, and private Gentlemen; and all the Laws relating to Medical Practitioners: with explanatory plates. By J. CHITTY, Esq. Barrister at Law. Part I. royal 8vo, pp. 466, with Index, price One Guinea. Butterworth, London, July, 1834.

6. The Surgical and Descriptive Anatomy of the Bones, Ligaments, and Joints. By

W. H. THOMAS, M.R.C.S. Small 8vo, pp. 309. Longman & Co. July 1834. Price 6s.

7. The Liverpool Medical Journal; published monthly, under the superintendence of an Association of Physicians and Surgeons, &c. Nos. 3 & 4, for July and August, 1834. *In exchange.*

8. L'Observateur Medical Belge; Journal de Médecine, &c. Avril et Mai, 1834. *In exchange.*

9. Clinical Lectures in the Manchester Infirmary. By EDWARD CARBUTT, M.D. 1 vol. 8vo, pp. 407. Longman & Co. July 1834.

10. Illustrations of the Natural History of Worcestershire, with information on the Statistics, Zoology and Geology of the County; including also, A short Account of the Mineral Waters. By CHARLES HASTINGS, M.D. 8vo, pp. 181, with Appendices, Maps, &c. Sherwood and Co. July, 1834.


11. An Essay on the Relation of the Theory of Morals to Insanity. By T. MAYO, Fellow of the Royal College of Physicians.

12. Some Observations on the Preparation and Medicinal Employment of the Ioduret and Hydriodate of Iron. By A. T. THOMSON, M.D. &c. 8vo. pp. 64, sewed. July, 1834.

13. A Synoptical View of the Diseases of the Chest, as illustrated either by Auscultation, Percussion, Thoracic Measurement, and Succussion; or by other Sources of Information. By RICHARD MADDOCK HAWLEY, M.D. Fellow of the Royal College of Physicians, Ed. &c. Atlas, pp. 6. 1834.

This is the most scientific and accurate auscultic Chart that has yet appeared. It will prove very useful to stethoscopic students and practitioners.

14. The Principles of Physiology applied to the Preservation of Health, &c. &c. By AND. COMBE, M.D. Second edit. enlarged. 1834.


 We are very glad to observe that that the first edition was exhausted in three or four months. This edition is greatly improved.

15. A Dictionary of Terms, employed by the French, in Anatomy, Physiology, Pathology, Practice, &c. with their derivations from the Greek and Latin, their Synonyms, &c. By SHIRLEY PALMER, M.D. Part I. pp. (no pages), royal 8vo, double column. July, 1834. Price 6s.

16. Reflections on the Nature of Inflammation, and its alleged Consequences. By DAVID BADHAM, M.D. one of Dr. Radcliff's Travelling-fellows from the University of Oxford. 8vo, pp. 67. Glasgow, July 1834.

17. Fragmenta de Viribus Medicamentorum positivis, sive in Sano Corpore Humano observatis. A SAMUELE HAHNEMAN, M.D. &c. Edidit F. F. QUIN, M.D. Medicus Ordinarius Leopoldi Primi Regis Belgarum, &c. 8vo, pp. 214. Londini, 1834.


18. A Series of Anatomical Plates, in Lithography, &c. Edited by JONES QUAIN, M.D. Professor of Anatomy and Physiology in the University of London. Division I.—Muscles. Fasciculi I. to XIV. Price Two shillings each Fasciculus.

 We have felt deep regret at being compelled, on various occasions, to speak unfavourably of the execution of these plates. We are happy to say, that the two or three last fasciculi display a very decided improvement. The character of Mr. Quain, and the prominent and honourable station which he occupies, should make him most careful not to permit inferior productions to receive the sanction of his name. An active superintendence of the draughtsman is indispensable on his part, and the lithographer should remember, that clearness and distinctness, in the shading and the outline, are absolutely necessary, in what must be not only drawings, but maps. It should be the aim of all parties concerned, to publish a set of plates superior to the common run of their predecessors.


We would strongly recommend Mr. Quain to abandon the idea of mixing up physiological comments with a description of the plates. What, in the name of Common Sense, has physiology to do with such an undertaking? The purchaser of the plates considers it a most intolerable nuisance, to be

forced to wade through pages of irrelevant discussion, before he can arrive at the matter of fact, the description, and elucidation of the drawings placed before him. We repeat, that we perceive an improvement in the last fasciculus. We shall watch the progress of the work, and we hope to speak of it more favourably as it proceeds.

19. An Explanation of the Causes why Vaccination has sometimes failed to prevent Small Pox, and also a Description of a Method, confirmed by Experience, of obviating such Causes. By EDWARD LEESE, &c. Part the Second. Octavo, stitched, pp. 36. London, 1833.


 An interesting pamphlet, from a zealous and amiable man.

20. A Collection of Geological Facts and Observations, intended to elucidate the Formation of the Ashby Coal-field, in the parish of Ashby-de-la-Zouch, and the neighbouring District; being the Result of Forty Years' Experience. By EDWARD MAMMATT, F.G.S. Illustrated by a Map and Profiles, coloured Sections of the Stratification, and 102 Plates of Vegetable Fossils, after Drawings taken from Nature. Royal 4to. Ashby-de-la-Zouch and London, 1834.

 This Work of Mr. M.'s must necessarily exert important influences on the study of Geology, in contributing, by FACTS, to establish and extend the fundamental principles of this most interesting science, and in tending, by OBSERVATIONS, to restrain that wild propensity to fabricate theories by which its progress and usefulness have too long been injuriously confined. For these reasons, we would prefer its claims for approbation on the attention of our geological readers. Chiefly, however, we bring Mr. M.'s instructive pages under the notice of physicians and other cultivators of the healing art, on the ground that it communicates a diversity of valuable information, on the Temperature of Mines and its bearings on the subject of a "Central Heat," on the formation of Thermal Springs, on the evolution of Carburetted Hydrogen Gas, on the uses of a Fossil Botany, and especially on the Nature and the Properties of the Bromated Mineral Waters of Ashby-de-la-Zouch, and their peculiar efficacy in preventing the development of the Pueral and Consumptive Predispositions, as their energetic agency in perfecting the treatment of many inveterate chronic diseases.

21. Observations on the Preservation of Hearing, and on the Choice, Use and Abuse of Ear-trumpets, &c. By J. H. CURTIS, Esq. Aurist to the King.


22. Oratio Harveiana in Novis Aedibus Collegii habita sext. kalend. Jul. an MDCCCXXXIV. Ab EDUARDO THOMA MONRO, M.D. Col. Reg. Med. Lond. Socio. Londini, MDCCCXXXIV.

 *An eloquent and classical Oration.*

23. The Cyclopædia of Practical Medicine and Surgery; a Digest of Medical Literature. Edited by ISAAC HAYS, M.D. Part I. Philadelphia, July, 1833.


24. The American Journal of the Medical Sciences. Nos. XXVI. and XXVII. For February and May, 1834.

25. A Demonstration of the Nerves of the Human Body. By JOSEPH SWAN. Quarto, pp. 92. Plates, XXV.


 *A notice of this in the Periscope.*

26. Memoir of the Life and Medical Opinions of JOHN ARMSTRONG, M.D. Formerly Physician to the Fever Institution of London, &c. To which is added, an Inquiry into the Facts connected with those Forms of Fever attributed to Malaria or Marsh Effluvium. By FRANCIS BOOTT, M.D. &c. In Two Volumes. Vol. II. Octavo, pp. 752. London, 1834.

27. The Principles and Practice of Obstetric Medicine, &c. By DAVID D. DAVIS, M.D. &c. Parts XXX. to XXXV. inclusive. Price two shillings each part.


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
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32. The Substance of a Lecture delivered at the Re-opening of the School founded by the late Joshua Brooks, Esq. By THOMAS KING, M.D. &c. Octavo, stitched, pp. 31. London, 1834.

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LITHOTRITY.

Mr. COSTELLO has been successful in comminuting a stone of extraordinary dimensions in his own institution. The calculus, when held in the instrument, measured three inches and a quarter in its long axis, and two inches three quarters in its smallest diameter. It was of fawn-coloured lithate of ammonia and hard. It was computed that one-third of the fragments was lost, as the patient collected only those which he voided during the night and morning—the rest of the day he generally spent in walking about town. The portion collected was weighed at Savory's, Bond Street, and amounted to five ounces two drachms. If to this be added the weight of the third computed to be lost, we shall have a concretion weighing seven ounces, removed by lithotripsy from a living man. This is certainly a splendid result. Mr. Costello stated, that had he not devised the double slide percussor, which he has limited to its grasping power, it would have been vain to attempt seizing such a stone by any other instrument. He ridiculed the idea of reducing not only this stone, but one of any considerable size and compactness by screw force. The patient's age was sixty-four, and he had laboured under his complaint upwards of five and twenty years.

INDEX.

A.		
Abdomen, wounds of the	299	
Abortions, manual assistance in	448	
Abscess, mammary, treatment of	541	
Abscesses in the iliac fossa	328	
Absentee, the, by Dr. James Johnson,	154	
Abstinence, the curative effects of	498	
Aconite, use of, in neuralgia	221	
Aloes, medicinal properties of	212	
Anatomical plates, by Mr. Quain, &c.	184	
Anatomy, pathological, Drs. Hope and Carswell on	184, 424	
Aneurism, caused by a sequestrum of bone	261	
Aneurisms, internal, Mr. Harrison on,	445	
Aneurisms, internal, Dr. Stokes on	459	
Anus, fissures of the	326	
Apoplexy, pathology of	429	
Arnott, Mr. his reply to Dr. Wise	287	
Artery, iliac, Mr. Guthrie's operation on	478	
Ascites, chronic, spontaneous cure of,	560	
Asphyxia, Dr. Kay's treatise on	92	
Asphyxia, Dr. Edwards on	99	
Asphyxia, treatment of	103	
Association, the Provincial Medical, Transactions of	171	
B.		
Barytes, poisoning from	548	
Beck, Dr. his essay on lepra	495	
Belden, Dr. report of Jane Rider's case	440	
Bell, Sir C. on wounds of the knee-joint	275	
Bellingeri, his inaugural dissertation on the 5th and 7th pairs of nerves	413	
Bellingeri, his case of opisthotonos	503	
Beobachtungen, Von Seiler on	49	
Bichat, his views on asphyxia	93	
Blackley, Dr. on the pulse	433	
Blood, effusion of, within pericardium	147	
Blood, Dr. Carson on the motion of	175	
Blood, on the influence of gravity on	204	
Bodies, living, effects of mercury upon,	213	
Bones, cysts developed in substance of,	302	
Botany, medical, Drs. Graves and Morries on	107	
Botany, medical, Messrs. Stephenson and Churchill on	106	
Brain, disorder of, after an accident	262	
Brain, pathological anatomy of the	425	
Brodie, Mr. on diseases of the joints	1	
Brodie, Mr. on inflamed synovial membrane	3	
Brodie, Mr. on ulceration of cartilages,	16	
Brodie, Mr. on ulceration of synovial membrane	12	
Brodie, Mr. on morbid alteration of synovial membrane	13	
Brodie, Mr. on caries of the spine	331	
Brodie, Mr. on tumors and loose cartilages in the joints	341	
Brodie, Mr. on malignant diseases of the joints	343	
Brodie, Mr. on hysterical affections of the joints	345	
Brodie, Mr. on gouty alteration of the joints	348	
Brodie, Mr. on inflammation of the bursæ mucosæ	349	
Brodie, Mr. on ununited fractures	529	
Bronchotomy, case of	263	
C.		
Cancerous diseases, treatment of	518	
Carbutt, Dr. his clinical lectures	563	
Carbutt, Dr. on inflammatory diseases,	565	
Caries, Mr. Wickham on	71	
Caries of the spine, Mr. Brodie on	331	
Carson, Dr. on hæmorrhage within the pericardium	147	
Carson, Dr. on the motion of the blood	175	
Carswell, Dr. his morbid anatomy	42	
Carswell, Dr. on softening from inflammation	43	
Carswell, Dr. on softening from arterial obliteration	47	
Carswell, Dr. on softening from gastric juice	47	
Carswell, Dr. on hæmorrhage	430	
Cartilages, on ulceration of the	16	
Cartilages, loose, in the joints	341	
Case of protracted somnolency	217	
Case, extraordinary of paraplegia	228	
Case of apparent death	229	
Cataract, Mr. Guthrie on extraction of,	178	
Catarrhal ophthalmia, Mr. Tyrrell on,	454	
Cauteries, M. Dupuytren on	327	
Cayol, Dr. on cancerous diseases	517	
Cellular membrane of joints, diseases of	76	
Cerebellum, sympathy of, with the generative organs	212	
Cerebellum, curious disease of the	501	
Cerebral diseases, Dr. Stokes' lectures,	542	
Chemistry, organic, M. Raspail on	365	
Chiffy, Mr. his medical jurisprudence,	462	
Chloruret of lime in blenorrhagia	510	
Cholera in Ireland	150	
Cholera, nitrate of silver in	444	

- Cholera, editorial remarks on the . . . 484
 Cholera, saline emetics in . . . 487
 Chord, spinal diseases of the . . . 375
 Circulation of the nervous system, Mr. Earle on . . . 143
 Circulation visible in some cryptogamous plants . . . 368
 Circulation, Mr. Handley on . . . 390
 Climate of Penzance . . . 468
 Clinical reports, from the Meath Hosp. . . 260
 Clinical reports from Glasgow Hosp. . . 265
 Clinical reports, from the Birmingham Eye Infirmary . . . 271
 Clinical reports, from the Middlesex Hospital . . . 275
 Clinical report from the Limerick Infirmary . . . 550
 Clinical Observations, by Dr. Graves, . . . 557
 Clinique Chirurgicale of M. Dupuytren . . . 289
 Clitoris, chronic enlargement of . . . 489
 Club-foot, M. Dupuytren on the . . . 322
 Club-foot, section of tendo-Achillis in, . . . 510
 College of Surgeons, last curriculum of, . . . 569
 Combe, Dr. A. on health and education . . . 168
 Concours, remarks on the French . . . 283
 Condylomata, venereal, Mr. H. Johnson on . . . 241
 Congenital dislocation of the femur . . . 320
 Consumption curable, Dr. Ramadge on . . . 62
 Cooper Mr. B. on fractures . . . 255
 Creosote, use of, in ulcerations . . . 221
 Creosote, use of, in ulcerations . . . 505
 Creosote, observations on . . . 527
 Crepitatio musculorum, case of . . . 452
 Croton oil, external use of . . . 235
 Curtis, Mr. essay on deaf and dumb . . . 495
 Cyanosis, interesting case of . . . 234
 Cyanuret of potass, death caused by . . . 222
 Cysts, developed in the substances of bones . . . 302
 Cysts, serous, M. Dupuytren on . . . 306
- D.**
- Deaf and dumb, Mr. Curtis essay on . . . 495
 Deafness, Mr. Swan on . . . 380
 Death, case of apparent . . . 229
 Death, Dr. W. Philip on . . . 362
 De Caudolle, his vegetable physiology . . . 353
 Deformities, spinal, infirmary for, . . . 282
 Diabetes insipidus, case of . . . 563
 Diagnosis, Dr. M. Hall's principles of, . . . 493
 Dickenson, Mr. his translation of Rayer . . . 391
 Dictionary of terms, by Dr. S. Palmer, . . . 477
 Digitalis, clinical observations on the use of . . . 201
 Disease, mesenteric, interesting case of . . . 226
 Diseases of the thymus gland, on the, . . . 145
 Diseases of skin, Rayer's treatise on . . . 391
 Dislocation of hip into foramen ovale . . . 250
 Dislocation of the lens . . . 273
 Dislocations of humerus, reduction of, 178
- Dispensary, self-supporting . . . 280
 Dispensary, London North-west Self-supporting . . . 567
 Dropsy, cured after tapping . . . 167
 Dropsy cured after paracentesis . . . 251
 Dropsy, albuminous urine in . . . 562
 Dupuytren's, M. Clinique chirurgicale, . . . 289
 Dupuytren, M. on gun-shot wounds . . . 291
 Dupuytren, M. on injuries of the head, . . . 296
 Dupuytren, M. on wounds of the chest, . . . 298
 Dupuytren, M. on cysts within bones, . . . 302
 Dupuytren, M. on serous cysts . . . 306
 Dupuytren, M. on the nail growing into the flesh . . . 309
 Dupuytren, M. on dislocations of the humerus . . . 312
 Dupuytren, M. on congenital dislocation of the femur . . . 320
 Dupuytren, M. on the club-foot . . . 322
 Dupuytren, M. on laceration of the perineum in females . . . 323
 Dupuytren, M. on fissures of the anus, . . . 326
 Dupuytren, M. on cauteries and moxas . . . 327
 Dupuytren, M. on abscesses in the iliac fossa . . . 328
 Dupuytren on spontaneous gangrene, . . . 512
 Dzondi, on morbus coxarius . . . 238
- E.**
- Earle, Mr. I. W. on functions of nerves . . . 116
 Eccles, Mr. on ulcers of the leg . . . 157
 Editorial remarks on the cholera . . . 484
 Education, Dr. A. Combe on . . . 168
 Edwards, Dr. experiments on suspended respiration . . . 99
 Egyptian mummies, Mr. Pettigrew on, . . . 84
 Elementary forms of disease, illustrations of . . . 42
 Elongation of the limb in hip-disease considered . . . 80
 Emetics, saline in cholera . . . 487
 Empyema, case of . . . 253
 Encysted tumor on the neck . . . 225
 Epigastric pulsations, Dr. Stokes on, . . . 448
 Epilepsy, treatment of . . . 214
 Epistaxis, on the use of cold in . . . 212
 Ergot, danger of large doses of the . . . 435
 Eruptions, syphilitic, Mr. H. J. Johnson on . . . 244
 Erysipelas, Dr. Macfarlane on . . . 266
 Erysipelas, different opinions as to the treatment of . . . 267
 Erysipelas, Arnott on . . . 278
 Erysipelas, symmetrical, Dr. Graves on . . . 559
 Everest, Mr. on homœopathy . . . 439
 Exanthemata, M. Rayer on the . . . 398
 Exostosis, Mr. Wickam on . . . 69
 External use of croton oil . . . 235
 Eyelids, tumors of the . . . 275
 Eyes, absence of the . . . 49
 Eyes, particular malformation of the, . . . 55

F.

Females, certain nervous affections in	165
Femur, fracture of the neck of the	166
Femur, congenital dislocation of the	320
Fever in the horse	91
Finger, adhesion of a separated	228
Fissure of the anus, M. Dupuytren on	326
Fœtus, formation of the omenta in the	222
Forbes, Dr. on climate of Penzance	468
Foreign body found in the heart	177
Fracture of the skull, case of	483
Fracture, compound, cases of	553
Fractures of the ribs and sternum	255
Fractures, ununited, Mr. Brodie on	529
Fragmenta de viribus medicamentorum	492

G.

Ganglion, otic, account of the	465
Gangrene, case of spontaneous dry	512
Generative organs, sympathy of cerebellum with	212
Geology of Switzerland	155
Gouty alteration of the joints	348
Graves, Dr. his Hortus Medicus	106
Graves, Dr. his clinical observations	557
Graves, Dr. on pneumo-thorax	558
Graves, Dr. on the administration of calomel	559
Graves, Dr. on diffuse inflammation	560
Graves, Dr. on albuminous urine in dropsy	562
Gravity, the influence of, on the blood	204
Gun-shot wounds, M. Dupuytren on	291
Guthrie, Mr. on extraction of cataract	178
Guthrie, Mr. his operation of tying the common iliac artery	478

H.

Hæmoptysis, on the application of cold in	212
Hæmorrhage, Dr. Carswell on	430
Hæmorrhagic tendency in a family	232
Hall's, Dr. M. principles of diagnosis	493
Hall, Dr. M. on the reflex function of the medulla oblongata, &c.	116
Handley, M. on the circulation	390
Hangsted on the thymus gland	195
Harrison, Prof. on internal aneurisms	445
Hawkins, Mr. on the urinary organs	530
Hawkins, Mr. on hernia	533
Health, Dr. A. Combe on	168
Hearing, relations of the cranium with	240
Hearing, disordered states of	380
Heart, foreign body found in the	1
Heart, Majendie on the sounds of the	1
Heat, animal, source of	208
Heat, morbid development of	226
Hemiplegia, case of	225
Henderson, Dr. his translation of Rabel	365
Hip-disease, Mr. Wickham on	80

Hip-disease, on lengthening and shortening of the limb in	80
Hip-disease, dislocation from	83
Homœopathy, Mr. Everest on	439
Homœopathy, Dr. Quin's work on	492
Homœopathism, failure of, in Russia	223
Hooping-cough, M. Blache on	210
Hope's, Dr. pathological anatomy, 184	424
Hope, Dr. on diseases of the uterus	184
Hope, Dr. on diseases of the brain	425
Horse, Mr. Percival on diseases of the	88
Hospitals, provincial, memorial from	161
Humerus, dislocated, mode of reducing the	178
Humerus, dislocations of the	312
Hydatids of kidney, passed by urethra	453
Hydatids, uterine, case of	176
Hydriodate of iron, Dr. A. T. Thomson on	476
Hydro-bronchocele, case of	513, 554
Hydrophobia, case of	173
Hypertrophy of the mammae	528
Hypertrophy of the stomach	502
Hysterical affections of the joints	345

I.

Iliac artery, Mr. Mott's operation of tying the	483
Infants, pulmonary organic disease in	230
Infants, purulent ophthalmia in	239
Inflammation, chronic of the prepuce	249
Inflammation, diffuse, Dr. Graves on	560
Inflammation of synovial membranes	3
Inflammation of the burse mucosæ	349
Inflammation of the nerves	122
Inflammation of the ovum	502
Inflammation, softening from; description	43
Injections of cold water into the umbilical cord	230
Insanity, ceasing after the operation of trephining	262
Insanity, Dr. Mayo on	466
Intestines, sutures in wounds of	299
Iodine, on the exhibition of	436
Iodine, use of, in scrofula	216
Ioduret of iron, Dr. A. T. Thomson on	476
Ireland, cholera in	150

J.

Johnson, Dr. James, description of an absentee	154
Johnson, Mr. H. J. on venereal warts, &c.	241
Johnson, Dr. singular case of crepitation of the lungs	452
Swainson, knee, wounds of	275
Swainson, Mr. Brodie on diseases of the	1
Joints, inflamed synovial membrane of	3
Joints, ulcerated synovial membrane of	12
Joints, altered synovial membrane of	13
Joints, ulceration of cartilages of	19

- Joints, scrofulous disease of . . . 33
 Joints, Mr. Wickham's treatise on the . . . 68
 Joints, loose cartilages in the . . . 341
 Joints, malignant diseases of the . . . 343
 Joints, hysterical affections of the . . . 345
 Joints, gouty alteration of the . . . 348
 Jurisprudence, medical, Mr. Chitty's work on . . . 462
- K.
- Kane, Mr. his surgical report . . . 550
 Kay, Dr. treatise on asphyxia . . . 92
 Kidney, tuberculous affection of the . . . 174
 Kidney, cysts in the . . . 186
 Kidney, hydatids of the, voided by the urethra . . . 453
- L.
- Laceration of centre of the perinæum, 323
 Lead, paralysis from . . . 514
 Lecturers, circular to . . . 570
 Lectures, Dr. Stokes', on cerebral diseases . . . 542
 Leeches, preservation of . . . 229
 Lens, dislocation of the . . . 273
 Leprosy, Dr. Beck's essay on . . . 495
 Leprosy of the jaws, Dr. Shapter on, 111
 Literary curiosities . . . 515
 Liverpool Medical Society, transactions of the . . . 171
 Lumbicus found in a wound . . . 215
 Lung, case of laceration of the . . . 257
 Lungs, spurious melanosis in the . . . 166
 Lymphatics of the arm, disease of the, 264
- M.
- Macfarlane, Dr. his clinical reports . . . 266
 Majendie on the sounds of the heart . . . 208
 Malaria, Dr. Weatherhead on . . . 157
 Malformations, &c. of the eyes, Von Seiler on . . . 49
 Mammeæ, hypertrophy of the . . . 523
 Mammary abscess, treatment of . . . 541
 Mayo, Dr. his essay on insanity . . . 466
 Medica sacra, Dr. Shapter's treatise on 109
 Medical reform, remarks on . . . 293
 Medical jurisprudence, Mr. Chitty's work on . . . 462
 Medical schools, provincial, Dr. Collins on . . . 571
 Melanosis, spurious, of the lungs . . . 166
 Menorrhagia, use of steel in . . . 209
 Mental affection, anomalous case of . . . 147
 Mental illusions, cases of . . . 545
 Mercury, effects of, on living bodies . . . 273
 Mercury, use of, in rheumatism . . . 274
 Mesenteric disease, interesting case of, 226
 Middlemore, Mr. his clinical reports . . . 271
 Monomania, homicidal . . . 210
 Monstrosities, Velpeau's remarks on, 208
 Morals, relation of, to insanity . . . 466
- Morbid alteration of synovial membrane . . . 13
 Morbus coxarius, shortening of the limb in . . . 238
 Morbus oryzeus . . . 471
 Motory functions, curious disturbance of the . . . 501
 Mott, Mr. his reclamation . . . 483
 Moxas, M. Dupuytren on . . . 327
 Mummies, Egyptian, Mr. Pettigrew on 184
- N.
- Nails growing into the flesh, on . . . 309
 Nerves, diseases of, Mr. Swan on . . . 116
 Nerves, functions of, Mr. Barle on . . . 116
 Nerves, inflammation of the . . . 122
 Nerves, ulceration of the . . . 123
 Nerves, division of the . . . 125
 Nerves, spinal, the diseases of the . . . 371
 Nerves, sensual, the diseases of the . . . 379
 Nerves, sympathetic . . . 384
 Nerves, Bellingeri on the fifth and seventh pairs . . . 413
 Nerves, Mr. Swan's demonstration of, 494
 Nervous system, reflex function of, Dr. Hall on the . . . 116
 Nervous affections in females . . . 165
 Neuralgia, simple treatment of . . . 216
 Neuralgia, use of aconite in . . . 221
 Neuralgia, Scarpa's observations on . . . 227
 Neuroses, Dr. Stokes' remarks on the, 543
 Nitrate of silver in cholera . . . 444
 Nosology, Dr. Weatherhead's synopsis 145
- O.
- O'Beirne on hydrocele of the neck . . . 554
 Operation, Sigaultian, case of . . . 500
 Ophthalmia, purulent, in infants . . . 239
 Ophthalmia treated with sublimate lotions . . . 509
 Ophthalmia, catarrhal, Mr. Tyrell on, 454
 Opisthotonos, Bellingeri's case of . . . 502
 Omenta, formation of, in the fœtus . . . 222
 Organic chemistry, M. Raspail's . . . 365
 Organs, urinary, Mr. Hawkins on the, 530
 Osseous cysts, M. Dupuytren on . . . 302
 Otic ganglion, account of the . . . 465
 Ovaritis puerperalis, cases of . . . 232
 Ovum, inflammation of the membranes of . . . 502
- P.
- Palmer, Dr. S. his dictionary . . . 477
 Pancras Street self-supporting dispensary . . . 280
 Paracentesis thoracis, case of . . . 253
 Paraplegia, extraordinary case of . . . 228
 Pelvic lomy, case of . . . 500
 Penzance, the climate of . . . 468
 Percival, Mr. on the diseases of the horse . . . 88

- Perforation of strictures. 473
 Pericardium, effusion of blood within
 the 147
 Perineum, laceration of the centre of, . . . 323
 Periodicals, foreign, spirit of the . . . 193
 Pertussis, remarks on 210
 Pertussis, Mr. Sandwith on 471
 Pettigrew, Mr. on Egyptian mummies, . . 84
 Philip, Dr. W. on sleep and death . . . 359
 Phlebitis, Mr. Arnott on 287
 Phrenological jurisprudence. 210
 Physiology, vegetable, De Caudolle on . . 353
 Placenta, new method of detaching the . . 230
 Plants, cryptogamous, the circulation
 in some 368
 Pneumo-thorax, case of, 259
 Pneumo-thorax, Dr. Graves' case of . . . 558
 Poisoning from sulphuric acid 490
 Poisoning from oxalic acid 490
 Poisoning from corrosive sublimate . . . 491
 Poisoning by barytes, and by the mi-
 neral acids 548
 Poisons, Dr. Roupell's work on 489
 Pomegranate bark against tetania . . . 213
 Pontine marshes, Dr. Weatherhead on . . 452
 Porrigo, M. Biett's treatment of 232
 Porrigo, the varieties of 406
 Portio dura; is it a nerve of hearing? . . 382
 Portio dura, Bellingeri on the 418
 Prepuce, chronic inflammation of the, . . 249
 Provincial hospitals, memorial from . . . 161
 Provincial medical schools, Dr. Col-
 lins on 571
 Puerperal ovaritis, cases of 232
 Pulse, the influence of position on the . . 433
- Q.
- Quin, Dr. his work on homœopathy, . . . 493
- R.
- Ramadge, Dr. his consumption curable . . 62
 Raspail, M. his organic chemistry . . . 365
 Raspail, M. on muscular contraction, . . 367
 Raspail, M. on the visible circulation
 in some cryptogamous plants . . . 368
 Rayer, M. on the diseases of the skin, . . 391
 Rayer, M. his classification 392
 Rayer, M. on the varieties of vaccinella . 404
 Recess, the, by Dr. James Johnson . . . 154
 Reclamation of Mr. Mott 483
 Recto-vesical lithotomy, case of 172
 Reflex function of the medulla oblon-
 gate, &c. 116
 Reform, medical, remarks on 285
 Respiration, effects of imperfect 23
 Retroversion of the uterus 21
 Rey, M. his treatise on the cerebro-
 spinal axis 325
 Rheumatism, use of mercury in 255
 Ribs, fractures of 255
 Rice, diseases caused by damaged . . . 472
- Rider, Jane, case of 440
 Roupell, Dr. his work on poisons 489
 Rupture of uterus 215
 Rupture of the vagina during delivery . 224
 Russia, failure of homœopathism in . . . 223
- S.
- Sacred writings, on the diseases men-
 tioned in 109
 Salt, emetics of, in cholera. 487
 Sclerotitis rheumatica, Mr. Middle-
 more on 273
 Scrofula, treatment of, in Grimany . . . 211
 Scrofula, use of iodine in 216
 Scrofula, Dr. Eager on 435
 Scrofulous disease of joints 33
 Secale cornutum, history of effects of . . 106
 Seiler on malformations of eyes 49
 Self-supporting dispensary 280
 Shapter, Dr. his sacra medica 109
 Sickness, sweating, M. Rayer on the . . 403
 Sirocco, Dr. Weatherhead on the 155
 Skin, M. Rayer on diseases of the . . . 391
 Sleep, Dr. W. Philip on 359
 Societies, temperance, in America . . . 159
 Softening from inflammation; des-
 cription 43
 Softening from obliteration of arteries, . 47
 Softening from action of gastric juice, . 47
 Somnambulism, case of 440
 Somnolency, extraordinary case of pro-
 tracted 217
 Soot, a substitute for creosote 506
 Spinal deformities, infirmary for 282
 Spine, Mr. Brodie on caries of the . . . 331
 Spots of blood, semen, etc. on linen . . 516
 Stafford, Mr. on the perforation of
 strictures 473
 Staphyloma, Mr. Middlemore on 273
 Staphyloraphy, description of 497
 Steel, use of, in menorrhagia 209
 Sternum, case of fracture of 253
 Stokes, Dr. on internal aneurisms 458
 Stokes, Dr. lectures on cerebral dis-
 eases 542
 Stokes, Dr. on epigastric pulsations . . . 448
 Stomach, hypertrophied, case of 503
 Strictures, treatment of, by perforation . 473
 Stromeyer, Dr. on the club-foot 510
 Suppression of the urinary and anal
 evacuations during eleven years . . . 223
 Surgeons, latest curriculum of College
 of 569
 Sutor, J. on wounds of the intestines . . 299
 Swan, Mr. on diseases of the nerves . . 116
 Swan, Mr. on diseases of spinal nerves . 371
 Swan, Mr. on injuries of spinal chord . 375
 Swan, Mr. on diseases of sensual nerves . 379
 Swan, Mr. on the portio dura 382
 Swan, Mr. on diseases of the sympa-
 thetic nerve 384

Swan, Mr. on tetanus	386	Ulceration of the nerves, Mr. Swan on	123
Swan, Mr. his demonstration of nerves	494	Urine, carbonate of ammonia in the . .	561
Sympathy, examples of morbid . . .	214	Urinary organs, Mr. Hawkins on the	530
Synovial membrane, Mr. Brodie on inflammation of	3	Uterine hydatids, case of	176
Synovial membrane, on ulceration of .	12	Uterus, Dr. Hope on the ulcer of the	185
Synovial membrane, morbid change of	13	Uterus, retroversion of the	212
Syphilis, secondary, Mr. H. Johnson on	244	Uterus, rupture and extreme tenuity of	215
T.			
Tænia, pomegranate bark against . .	213	V.	
Taliacotian union, case of	223	Vaccination in Italy, report on . . .	193
Tarsal cartilages, disease of	272	Vaccinella, varieties of	404
Temperance societies in America . .	159	Vagina, rupture of the, during delivery	224
Tendo Achillis, section of the, in club-foot	510	Vegetable physiology, De Caudolle on,	353
Tetanus, Mr. Swan on	384	Velpeau, M. on certain monstrosities	208
Thomson, Dr. A. T. on ioduret of iron.	476	Venereal warts, &c. Mr. H. Johnson on	241
Thymus, description of its anatomy and pathology	194	Veratria, editorial report on	163
Transactions of the Provincial Medical Association	171	Vindiciæ medicæ, by Sir G. Tuthill . .	113
Transactions of the Liverpool Medical Society	171	Violation, suspected, case of	524
Trephine, use of, in caries and necrosis	75	W.	
Trephining, interesting case of . . .	262	Warts, venereal, Mr. H. Johnson on .	241
Trigeminus nerve, Bellingeri on the .	413	Weatherhead, Dr. synopsis of nosology	145
Tuberculous affection of the kidneys	174	Weatherhead, Dr. on Pontine marshes	152
Tumor, encysted, case of	225	Weatherhead, Dr. on the sirocco . . .	155
Tumors of the eyelids	275	Weatherhead, Dr. on malaria	157
Tumor, anomalous, in the hypochondrium	438	Wickham, Mr. on the joints	68
Tuthill, Sir George, defence of the College of Physicians	113	Wickham, Mr. on exostosis	69
Trell, Mr. on catarrhal ophthalmia	454	Wickham, Mr. on necrosis	70
Tytler, Dr. his views respecting rice .	472	Wickham, Mr. on caries	71
U.		Wickham, Mr. on inflamed synovial membrane	76
Ulcers of the leg, Mr. Eccles on . . .	157	Wickham, Mr. on inflamed cellular membrane of joint	76
Ulcers, use of creosote in	221	Wickham, Mr. on relaxation of ligaments	78
Ulceration of the cartilages, Mr. Brodie on	16	Wickham, Mr. on abscess and anchylosis	79
		Wickham, Mr. on disease of the hip .	80
		Williams, Dr. on asphyxia	105
		Wilson, Dr. on cholera in Ireland . .	150
		Wounds of the knee-joint	275
		Wounds, gunshot, M. Dupuytren on .	291

LITERARY NOTICES.

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